

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1963

No. 185

UNITED STATES, ET AL., APPELLANTS,

VS.

R. J. BOYD, COMMISSIONER.

APPEAL FROM THE SUPREME COURT OF THE STATE OF TENNESSEE

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[fol. 1]

**IN THE CHANCERY COURT PART I OF DAVIDSON
COUNTY, TENNESSEE**

No. 80060

THE UNITED STATES OF AMERICA, and UNION CARBIDE CORPORATION, a corporation organized under the laws of the State of New York and authorized to do business in the State of Tennessee, Complainants,

vs.

B. J. BOYD, COMMISSIONER OF FINANCE AND TAXATION OF THE STATE OF TENNESSEE, whose office and official residence are located in Davidson County, Tennessee, Defendant.

ORIGINAL BILL—Filed May 28, 1958

[fol. 2] Complainants respectfully show to the Court:

I

Complainant, the United States of America, by the United States Attorney for the Middle District of Tennessee, Fred Elledge, Jr., acting under direction of the Attorney General, respectfully shows to the Court that it has a direct and primary interest in the subject matter involved in this suit and in the success in this suit of the complainant, Union Carbide Corporation, (hereinafter referred to as Carbide) in order to protect its sovereignty over its property and the operations being conducted by the Atomic Energy Commission, a governmental agency of the United States, pursuant to and under the authority of the Atomic Energy Acts of 1946 and 1954 as amended. (42 U. S. C. A. Secs. 2011-2281)

II

Complainants respectfully show to the Court that Carbide is a corporation organized under the laws of the State of New York and during the period involved in this litigation had an office at Oak Ridge, Tennessee. Pursuant to a

contract between the complainants, which contract is more fully hereinafter referred to, complainant Carbide is presently engaged at Oak Ridge, Tennessee in the execution of functions and activities of the Atomic Energy Commission for or pertaining to the processing and production of source, special nuclear, by-product and other material, atomic weapons parts, and research and development in the field of atomic energy under the authority of the Atomic Energy Acts of 1946 and 1954 as amended.

The defendant, B. J. Boyd, is the Commissioner of Finance and Taxation of the State of Tennessee and is herein sued in his official capacity. The said Commissioner of Finance and Taxation is by various statutes of the State of Tennessee charged with the responsibility of collecting the taxes assessed and collected under the Tennessee Retailers' Sales Tax Act as amended.

III

This suit is brought to recover the sum of Seventy-one [fol. 3] Thousand, Three Hundred Seventy-six and 36/100 Dollars (\$71,376.36) asserted by the State of Tennessee and the defendant Commissioner to have been due and owing by the complainant, Union Carbide Corporation, to the State of Tennessee for Sales and Use Taxes for the month of July, 1956, and which taxes were paid to the defendant Commissioner under protest by Carbide on the 30th day of April, 1958. This payment was so made after notice had been received by Carbide from the defendant Commissioner that unless payment of such tax was made on or before the date payment was actually made, distress warrants would be issued against Carbide and levied upon its property, and sufficient thereof for the payment of said tax would have been seized. This payment was wholly involuntary.

The sum total of taxes thus paid under protest and duress and for which recovery is sought herein consisted of Sales and Use Taxes allegedly due from Carbide as a result of certain transactions and operations pursuant to the contract between Carbide and the Atomic Energy Commission, which are hereinafter more particularly set forth.

IV

The defendant has advised the complainants that in addition to the payment heretofore exacted for the month of July, 1956, of Carbide and which payment was made involuntarily and under protest, as set forth in Section III of this Bill of Complaint, Sales and Use Taxes of the same type are claimed by the State of Tennessee as due from Carbide for the entire period from May 1, 1955, up to and including March 20, 1957.

These complainants are advised that similar claims for like taxes are being asserted by defendant Commissioner against various other contractors who were likewise engaged in the performance of work of the Atomic Energy Commission at Oak Ridge, Tennessee, during this same period of time.

The total amount of taxes thus claimed by the State of Tennessee is approximately Two Million Dollars, of which [fol. 4] more than One Million, Five Hundred Thousand Dollars is claimed from Carbide.

V

Complainants would further show to the Court that on or about January 1, 1947, acting pursuant to and under the Atomic Energy Act of 1946, and Executive Order No. 9816, dated December 31, 1946 (12 Federal Register 37) of the President of the United States, all the Government-owned plants, buildings, facilities and equipment at Oak Ridge, Tennessee, along with the control and operation of all atomic energy development, experimental and production work thereat, including the contract between the United States and Carbide, which contract is hereinafter referred to, were transferred from the Manhattan District of the War Department to the Atomic Energy Commission. These plants and facilities included the only (at that time) Atomic Energy Commission gaseous diffusion plant for the production of special nuclear material; the Oak Ridge National Laboratory; and other plants which were of vital importance to the national defense and other programs of the Atomic Energy Commission. These plants and facilities have been substantially expanded, and new plants and facilities added by the Atomic Energy Com-

mission since 1947. Complainants would further show that all of said plants and facilities are an integral and indispensable part of the processing and manufacturing facilities and activities of the Atomic Energy Commission which are carried on in various Atomic Energy Commission plants and facilities throughout the United States.

VI

Complainants would further show to the Court that on November 23, 1943, Carbide and Carbon Chemicals Corporation, the predecessor to the present complainant, Carbide, entered into a contract with the United States of America for the performance of certain experimental and production work in Government-owned facilities at Oak Ridge, Tennessee, which contract was designated as Contract No. W-7405 ENG 26 and which contract was effective as of January 18, 1943. This contract has been substantially revised in the intervening years. During the period material to this litigation the entire contract agreement between Carbide and the Atomic Energy Commission was contained in Supplemental Agreements 27 through 37 to the original contract. Said Supplemental Agreements were authorized by and made pursuant to the Atomic Energy Acts of 1946 and 1954, as amended. The foregoing Supplemental Agreements Nos. 27 through 37 will be filed on the hearing of this case or sooner if required.

VII

Complainants would further show to the Court that pursuant to said Supplemental Agreements 27 through 37, and during the period material to this litigation, Carbide was engaged in the management, operation and maintenance of Atomic Energy Commission production and research facilities at Oak Ridge, Tennessee, and Paducah, Kentucky, and in the performance of other activities of the Atomic Energy Commission under directions, instructions and over-all supervision of the Atomic Energy Commission. These production and research facilities included two of the Atomic Energy Commission's gaseous diffusion plants for the production of special nuclear material, the Oak Ridge National Laboratory, and other facilities of

vital importance to the national defense programs carried on in Atomic Energy Commission facilities. The operations conducted with and in said plants and facilities constituted activities of the Atomic Energy Commission under the Atomic Energy Acts of 1946 and 1954, as amended.

For its work and services pursuant to said contract Carbide was paid a fixed management fee and received as allowable costs the expenses necessary or incident to the contract work, and not excluded under the contract provisions. Such allowable costs were paid from Government funds advanced to Carbide solely for this purpose.

In general the work and services performed by Carbide under the contract were carried on in close day by day cooperation with the Atomic Energy Commission and its staff. Carbide was selected and has been retained for such work and services because of its technical and [fol. 6] managerial ability. The working relationship between the Atomic Energy Commission and Carbide, in general, resembles that between a government agency and its field office or an industrial company and its branch office; i.e., Carbide undertook to carry on an extensive operation of the Atomic Energy Commission, and the latter established the objectives, made the decisions required to fit the operation into the national program, and exercised overall supervision and control of all the activities under the contract including the use of public funds, personnel administration, security, and safety.

The complainants would also show that the Atomic Energy Commission had a staff of employees at Oak Ridge and Paducah which maintained day to day contact with the operations being carried on under said contract, as well as other related operations and activities conducted in other Atomic Energy Commission plants and facilities, and exercised such direct supervision and control over said operations and services as were deemed necessary or desirable. In the performance of said operations and services pursuant to the aforesaid contract Carbide was a management contractor for the Atomic Energy Commission and as such was an agent and instrumentality of the United States.

The Atomic Energy Commission's plants and facilities at Oak Ridge, Tennessee, which were being managed,

operated and maintained by Carbide cost the United States in excess of One Billion Dollars excluding the value of process materials. During the period material to this litigation the annual operating expenses at Oak Ridge borne entirely by the Atomic Energy Commission out of annual appropriations by the United States under the contract with Carbide were in excess of Two Hundred and Eight Million Dollars, including the value of electricity, and other direct Atomic Energy Commission procured and furnished materials and services used in the operations; but not including the cost of process materials procured and furnished by the Atomic Energy Commission. During a twelve-month period Carbide received at Oak Ridge [fol. 7] Atomic Energy Commission-owned process materials having a cost basis in excess of Five Hundred and Seventy Million Dollars. All such plants, facilities, equipment, materials and property were used solely in the operations of the Atomic Energy Commission.

VIII

The complainants would show to the Court that under and pursuant to the terms of the aforesaid contract Carbide was not required to use its own funds in the payment of allowable costs. The Government funds advanced to Carbide were deposited in a designated national bank in accordance with the contract terms and requirements of the Atomic Energy Commission and the United States Treasury Department. Such accounts were designated as "Government Fund Accounts." These accounts and the funds therein were at all times so designated on the books and records maintained by Carbide. For accounting purposes Carbide was treated as though it were a branch office and the Atomic Energy Commission the home office. All of Carbide's financial and accounting operations were required to be conducted in accordance with Atomic Energy Commission instructions, and the accounts maintained by Carbide were an integral part of the Atomic Energy Commission's accounting system. Under the provisions of said contract the aforesaid taxes which were paid to the State of Tennessee through the Department of Finance and Taxation under protest and as a result of duress, as hereinbefore set forth, were paid by Carbide out of funds of the com-

7

plainant, United States, furnished to Carbide, and the recovery of such funds will be for the account of the United States and will be deposited as the Atomic Energy Commission may direct.

If the complainant, Carbide, is compelled to pay the Sales and Use Taxes claimed by the State of Tennessee for the entire period from May 1, 1955, up to and including March 20, 1957, the complainant, United States, will be required to furnish the funds with which to pay such taxes.

[fol. 8]

IX

The tax assessment which has been made against Carbide by the defendant Commissioner and referred to in Section III of this Bill, and on which the tax payment was made under protest and as a result of duress on the 30th day of April, 1958, was based upon allegedly taxable procurements and uses of tangible personal property by Carbide at Oak Ridge, Tennessee, under its contract with the Atomic Energy Commission, notwithstanding the complainants' contention that the said procurements and uses were by and for the Atomic Energy Commission through Carbide as an agent and instrumentality of the United States under the aforesaid contract. The total taxes demanded by the defendant Commissioner amounted to Seventy-one Thousand, Three Hundred Seventy-six and 36/100 Dollars (\$71,376.36), all as shown in the tax bill rendered by the defendant to Carbide on April 30, 1958, copy of which is attached hereto and marked Exhibit 1, but which need not be copied for process. Defendant Commissioner asserts authority to make said tax assessment and collection under and by virtue of Section 67-3001 *et seq.* of Tennessee Code Annotated.

Because of the action of the defendant Commissioner in requiring the payment of these taxes in order to avoid seizure of the property of the complainant Carbide under a distress warrant, payment under protest of these taxes was authorized by the Atomic Energy Commission and the institution of this suit by complainants for recovery of the sums so paid was authorized by the Atomic Energy Commission and the Attorney General of the United States.

X

As a necessary and integral part of the work and services were and are an essential and integral part of the activities of the Atomic Energy Commission in the interest of national welfare, security and defense, Carbide has procured on behalf of the Atomic Energy Commission, or has been furnished by the Atomic Energy Commission, property of the kind described as being taxable under the said [fol. 9] Retailers' Sales Tax Act and will continue to so procure or be furnished such property. All of such tangible personal property so procured by Carbide or furnished by the Atomic Energy Commission, has been or will be used in the performance of activities of the Atomic Energy Commission pursuant to the contract hereinabove referred to, or has been or will be otherwise disposed of as directed by the Atomic Energy Commission pursuant to the contract hereinabove referred to, or has been or will be otherwise disposed of as directed by the Atomic Energy Commission. All such procurements by Carbide have been and are made on procurement forms and terms and conditions approved by the Atomic Energy Commission and pursuant to procurement policies and practices authorized or directed by the Atomic Energy Commission.

During the period material to this litigation the contract of the Atomic Energy Commission with Carbide provided that title to and ownership of all property furnished by the Government remained in the Government and title to and ownership of all property procured by and for the Atomic Energy Commission through Carbide passed directly from the vendor to the Government.

The purchase orders issued by Carbide stated:

"It is understood and agreed that this Purchase Order is entered into by the Company for and on behalf of the Government; that title to all supplies furnished hereunder by the Seller shall pass directly from the Seller to the Government, as purchaser, at the point of delivery; that the Company is authorized to and will make payment hereunder from Government funds advanced and agreed to be advanced to it by the Commission and not from its own assets, and administer this Purchase Order in other respects for the

Commission, unless otherwise specifically provided for herein; that administration of this Purchase Order may be transferred from the Company to the Commission of its designee, and in case of such transfer and notice thereof to the Seller the Company shall have no further responsibilities hereunder; and that nothing herein shall preclude liability of the Government for any payment properly due hereunder if for any reason such payment is not made by the Company from such Government funds."

In addition to procurements from regular commercial sources, Carbide as agent of the Atomic Energy Commission procured items of tangible personal property from various vendors under contracts with the Government to [fol. 10] sell items of equipment and supplies to Government agencies. It also obtained Government-owned property from Government warehouses or depots maintained by various Government agencies. Carbide also obtained Government property from the Atomic Energy Commission and from other Atomic Energy Commission contractors in accordance with transfer and use policies and practices established by the Atomic Energy Commission to obtain maximum utilization of Government-owned property in all of the Atomic Energy Commission's operations. Title to and ownership of all such property so procured or obtained by Carbide vested directly in the Government or remained in the Government and at no time did Carbide acquire title to or ownership of such property.

The Atomic Energy Commission itself procured or obtained many types and classes of tangible personal property, which it furnished to Carbide for use in the operations and services performed by Carbide under the contract. These included the feed and other process materials used in the research and production facilities and other items of equipment, supplies, and materials which the Atomic Energy Commission determined it would procure and furnish for the operation. Title to and ownership of all such property vested directly in the Government or remained in the Government and at no time did Carbide acquire title to or ownership of such property.

XI

Complainants would further show to the Court that in all of the aforesaid procurements and uses of tangible personal property pursuant to and as a part of Carbide's operations as a management contractor for the Atomic Energy Commission, Carbide was acting as an agent and instrumentality of the United States. At no time did Carbide have the beneficial use of such property for its private ends.

XII

The complainants deny that Carbide in the operations [fol. 11] for the Atomic Energy Commission at Oak Ridge, Tennessee, was, during the period for which the defendant is asserting a claim for taxes under the Tennessee Retailers' Sales Tax Act, exercising a taxable privilege within the meaning of said statutory enactment and further deny that any Sales or Use Tax can legally be assessed against or collected from Carbide under and by virtue of the provisions of said statute. It is denied that Carbide has procured, used or stored for use or consumption any tangible personal property in connection with the functions performed under the aforesaid contract in such a manner as to create liability for any Sales or Use Tax under or by virtue of the provisions of the aforesaid statute.

In the performance of the aforesaid contract Carbide was performing activities of the Atomic Energy Commission and was not engaged in any private business or commercial activity for profit.

XIII

Complainants further aver that by reason of the facts hereinbefore to the Court shown the Tennessee Retailers' Sales Tax Act, when properly construed neither necessitates nor authorizes the collection of the Sales Tax or the Use Tax which the defendant has assessed against, and collected from, Carbide for the month of July, 1956, nor does it authorize the assessment against or collection from Carbide of either of such taxes for any portion of the period between May 1, 1955, and March 20, 1957.

XIV

Complainants aver that if the Tennessee Retailers' Sales Tax Act is construed to require the payment of the Tennessee Sales Tax by dealers on sales made to Carbide which are exempt from tax because of Federal immunity under the Constitution of the United States or any Act of Congress, said Tennessee Act is discriminatory and invalid because it is repugnant to the Constitution of the United States, including Article I, Section 8, Clause 18, Article IV, Section 3, Clause 2, Article VI, Clause 2, And [fol. 12] the 14th Amendment, Section 1 thereof, and Article II, Section 28 of the Constitution of the State of Tennessee.

XV

Complainants aver that if the Tennessee Retailers' Sales Tax Act is construed to be applicable to dealers on sales made to Carbide which are exempt from tax because of Federal immunity under the Constitution of the United States of any Act of Congress, said Tennessee Act is discriminatory and invalid as applied because it is repugnant to the Constitution of the United States, including Article I, Section 8, Clause 18, Article IV, Section 3, Clause 2, Article VI, Clause 2, and the 14th Amendment, Section 1 thereof, and Article II, Section 28 of the Constitution of the State of Tennessee.

XVI

Complainants aver that if the Tennessee Retailers' Sales Tax Act is construed as requiring the imposition upon and collection of such taxes from Carbide because of the transactions and uses of property described in the preceding sections of this Bill, said Tennessee Act is invalid because it is repugnant to the Constitution of the United States, including Article I, Section 8, Clause 18, Article IV, Section 3, Clause 2 and Article VI, Clause 2.

XVII

Complainants aver that if the Tennessee Retailers' Sales Tax Act is construed to be applicable to Carbide because of the transactions and uses of property described in the

preceding sections of this Bill, said Tennessee Act is invalid as so applied because it is repugnant to the Constitution of the United States, including Article I, Section 8, Clause 18, Article IV, Section 3, Clause 2, and Article VI, Clause 2 thereof.

XVIII

Complainants aver that the assessment of the Sales and Use Taxes by the defendant Commissioner as referred to herein constitute an assessment of taxes upon the exclusive properties, activities or income of the United States, which properties, activities and income are immune from taxation by the State of Tennessee under the Constitution [fol. 13] of the United States, including Article I, Section 8, Clause 18, Article IV, Section 3, Clause 2, and Article VI, Clause 2.

XIX

Complainants further aver that the assessment against Carbide and the exaction from it, of the taxes set forth in this Bill impose taxes upon an agent and instrumentality of and for the United States and constitute an unconstitutional imposition of such tax upon the United States.

XX

For each and all of the reasons set forth in Sections XII through XIX of this Original Bill, the assessment and collection of the taxes paid under protest by Carbide, as set forth above and for which recovery is herein sought, is illegal, contrary to law, and void, and these complainants are entitled to have and recover the full amount of said taxes.

XXI

As shown in the foregoing recitals of this Bill the United States is directly and immediately affected by the taxes levied against and collected from Carbide for or in connection with the performance of activities of the Atomic Energy Commission, which were authorized by and performed under the Atomic Energy Acts of 1946 and 1954 as amended. In addition, in this cause Government-owned property is being used as the measure of taxation against an agent or instrumentality of the United States. More-

over, the moneys sought to be recovered herein are moneys rightfully due and belonging to the United States which the defendant Commissioner illegally and unlawfully demanded and collected from Carbide.

XXII

The Premises Considered, Complainants pray:

First: That proper process issue requiring the defendant to appear and answer this Bill, but his oath to his answer is waived.

Second: That upon the hearing decree be rendered in favor of complainants and against the defendant for the [fol. 14] said sum of Seventy-one Thousand, Three Hundred Seventy-six and 36/100 Dollars (\$71,376.36), and that proper steps be taken pursuant to the statutory requirements of the State of Tennessee to the end that the Comptroller of the State of Tennessee shall issue his warrant for the amount of said decree and in order that the amount so decreed shall be paid in preference to other claims on the State Treasury.

Third: That declaratory judgment or decree be entered herein adjudging and decreeing that complainant, Union Carbide Corporation, does not owe the State of Tennessee or the Commissioner of Finance and Taxation of the State of Tennessee; any amount for Sales and/or Use Taxes for the month of July, 1956, for or based upon the procurement, use, storage, consumption or storage for use or consumption of any tangible personal property pursuant to or in connection with the performance of any of the activities of the Atomic Energy Commission described herein.

Fourth: That declaratory judgment or decree be entered herein adjudging and decreeing that Union Carbide Corporation does not owe the State of Tennessee nor the Commissioner of Finance and Taxation of the State of Tennessee any amount for Sales and Use Taxes for the period from May 1, 1955, to March 20, 1957, or any portion thereof, for or based upon the procurement, use, storage, consumption or storage for use or consumption of any tangible personal property pursuant to or in connection with

the performance of any of the activities of the Atomic Energy Commission described herein.

Fifth: That they be given all such other, further and general relief as they or either of them may be entitled to on the hearing.

Fred Elledge, Jr., United States Attorney for the Middle District of Tennessee, Solicitor for Complainant, United States of America. Jackson C. Kramer, R. R. Kramer, Solicitors for Complainant, Union Carbide Corporation.

[fol.15] Of Counsel: L. K. Olson, General Counsel, J. W. Ould, Jr., Assistant General Counsel, O. S. Hiestand, Jr., David L. Oakley, Jr., Herzel H. E. Plaine, Attorneys, For United States Atomic Energy Commission.

Kramer, Dye, McNabb & Greenwood, For Union Carbide Corporation.

We hereby acknowledge ourselves surety for the costs incident to this suit in an amount not to exceed Two Hundred Fifty Dollars (\$250.00).

Jackson C. Kramer, R. R. Kramer.

[fols. 16-17] EXHIBIT 1 TO ORIGINAL BILL

State of Tennessee

DEPARTMENT OF FINANCE AND TAXATION
Nashville

(3)

Tax Bill

012-71-0148

Union Carbide Nuclear Company,
Division of Union Carbide Corporation,
P. O. Box P,
Oak Ridge, Tennessee.

Year	Tax	Penalty	Interest	Total	Kind of Tax	Amount Due
July, 1956	\$71,376.36				Sales and Use	\$71,376.36

Filed May 28, 1958.

[Signature illegible]

Important—To assure prompt and correct credit, mail duplicate bill with remittance to Department of Finance and Taxation, 107 War Memorial Building, Nashville 3, Tennessee. If a receipt is required, enclose original bill also. It will be endorsed "Paid" and returned to you.

B. J. Boyd, Commissioner of Taxation.

[fol. 18] IN THE CHANCERY COURT PART ONE FOR DAVIDSON
COUNTY, TENNESSEE

[Title omitted]

ANSWER TO ORIGINAL BILL—Filed September 3, 1958.

Comes defendant B. J. Boyd, Commissioner of Finance and Taxation of the State of Tennessee and for answer to the original bill filed against him in this cause does say:

I

It is denied that the complainant, United States of America, has any direct or primary interest in the subject matter involved in this suit, or that there is at stake in this suit any sovereignty of the United States of America, or any of its sovereign rights, powers or immunities. To the contrary, defendant avers that the Tennessee taxes called into question herein are imposed upon the Union Carbide Corporation alone on account of its activities within the State of Tennessee, and that the effect of these taxes upon the United States of America is but secondary and indirect, and exists solely on account of the voluntary assumption by the United States of America of the economic burden [fol. 19] resulting from such taxes. Defendant assumes that the Court will permit the United States of America to be heard herein to the extent of any interest which it has or can show, but would emphasize to the Court that the State of Tennessee has not sought and does not now seek to impose any tax upon the United States or any of its governmental agencies or instrumentalities. Defendant admits that the Atomic Energy Commission is a governmental agency of the United States, pursuant to and under the authority of the Atomic Energy Acts of 1946 and 1954. He denies however, most emphatically, that such status is enjoyed by the Union Carbide Corporation or any other private corporation contracting with the United States Government or any of its agencies or instrumentalities.

II

The allegations and averments contained in Paragraph II of the original bill are admitted. Defendant further avers, however, that the Union Carbide Corporation is duly domesticated in Tennessee and doing business within Tennessee under its Tennessee domestication, and that it is a private, profit-type corporation engaged in business in this State for the purpose of profit, and that its activities in Tennessee do result in a profit of a very substantial character to it and its shareholders.

III

All the allegations and averments contained in Paragraph III of the original bill are admitted.

IV

All the allegations and averments contained in Paragraph IV of the original bill are admitted.

V

All the allegations and averments contained in Paragraph V of the original bill are admitted.

VI

It is admitted that on November 23, 1943, Carbide and Carbon Chemicals Corporation, the predecessor to the present complainant, Union Carbide Corporation, entered into a contract with the United States of America for the [fol. 20] performance of certain experimental and production work in Government-owned facilities at Oak Ridge, Tennessee, such contract being designated as Contract No. W-7405-ENG-26, and being effective as of January 18, 1943. It is further admitted that this contract has been substantially revised in the intervening years. Defendant avers that one purpose of this revision was to attempt to clothe the Union Carbide Corporation with the attributes of a governmental agency for the purpose of avoiding taxation by the State of Tennessee of this corporation, chiefly to thwart the application of the Tennessee sales and use taxes

to the use of materials of tangible personal property employed by the Corporation in the furtherance of its contracts, following the removal by Congress of the statutory exemption formerly contained in Section 9(b) of the Atomic Energy Act, and until that time enjoyed by Union Carbide Corporation and its predecessors.

VII

Having no information with regard to the management, operation or maintenance of Atomic Energy Commission production and research facilities at Oak Ridge, Tennessee and Paducah, Kentucky, defendant denies all of the allegations contained in the original bill with respect to these matters.

Defendant emphatically denies that the work and services performed by the Union Carbide Corporation were carried on in close day by day cooperation with the Atomic Energy Commission, or its staff. To the contrary, defendant avers that there is no close cooperation with respect to the actual routine day-to-day work carried on by Union Carbide Corporation, for the reason that the latter alone has employees possessing the technical skill and knowledge requisite to the carrying on of an operation of the type in question, the Atomic Energy Commission not possessing the requisite staff, technical and managerial facilities or knowledge itself to conduct such an operation. Defendant further avers that all the activities carried on [fol. 21] by Carbide are performed by persons who are private employees of Carbide, solely controlled by Carbide, solely answerable to Carbide and its management, and solely paid by Carbide, and that these persons are in no sense of the word employees of the Atomic Energy Commission or any other agency or department of the United States Government. It is likewise vigorously denied that Union Carbide Corporation is, or ever has been, an agent or instrumentality of the United States, either as a management contractor or in any other capacity.

Defendant admits the allegations with respect to the cost of the operations at Oak Ridge, Tennessee, but would insist to the Court that they are completely immaterial to this lawsuit in that the State of Tennessee has made no

contention whatsoever that the taxes in question are applicable with respect to government-owned process materials furnished by the Atomic Energy Commission to Union Carbide Corporation. No part of the taxes involved in this lawsuit were imposed with respect to such materials, and defendant would show the Court that he has no intention of asserting against Union Carbide Corporation or any other entity, any sales or use tax liable on account of or with respect to the acquisition or use of such materials.

VIII

Having no information with respect to any of the allegations contained in Paragraph VIII of the original bill, defendant denies them each and all.

IX

All the allegations and averments contained in Paragraph IX of the original bill are admitted.

X

Defendant neither admits nor denies the allegations contained in Paragraph X of the original bill respecting materials procured by or furnished to the Union Carbide Corporation and used by it in the performance of its contract with the Atomic Energy Commission, and likewise neither admits nor denies the allegations respecting [fol. 22] the form and manner of procurement of such materials, including the type of purchase order used in such procurement and the vesting or reservation of the title to such materials in the Atomic Energy Commission, but defendant would require strict proof of such allegations insofar as they are deemed to be material to the determination of this controversy. Defendant would, however, show the court that irrespective of the form and manner of procurement by Union Carbide Corporation of such materials, or of the vesting or reservation of the title to such materials in the Atomic Energy Commission, the Tennessee sales and use taxes are clearly applicable to the use by Union Carbide Corporation, of all such materials from and after May 1, 1955 by virtue of the follow-

ing provisions of the Tennessee sales and use tax law as codified in Tennessee Code Annotated:

67-3003, which declares it to be a taxable privilege to sell tangible personal property at retail or to use same in Tennessee, irrespective of the ownership of such property or any tax immunity which may be enjoyed by the owner thereof;

67-3004, which places liability specifically upon contractors using tangible personal property in the performance of contracts or fulfilment of contractual obligations, whether the title to such be in the contractor, contractee or any other person, or whether the title holder would be subject to taxation:

67-3016, which makes the tax collectible as of the time of sale or purchase from all who are engaged as dealers in the sale, use, consumption or storage of tangible personal property in Tennessee;

67-3017, which defines the term 'dealer' to mean any person who uses tangible personal property in the performance of a contract for the fulfilment of 'con-[fol. 23] tractual obligations, whether title to such property is in him or some other entity, and whether or not such other entity is liable for taxation; and

67-3018, which provides that in the event that sales or use tax cannot be passed on to the purchaser or consumer by reason of the Federal Constitution or any Act of Congress, it shall nevertheless be paid by the dealer:

Further, defendant would show the court that complainants' Allegations as set forth in the concluding sub-paragraph of Paragraph X of the original bill are wholly immaterial in that absolutely no effort is made by the State of Tennessee to impose a sales or use tax with respect to feed and other process materials, such being clearly exempted from taxation under the fourth paragraph of Section 67-3004 T. C. A., and no contention to the contrary having been made by defendant.

XI

Defendant denies that the procurements and uses of tangible personal property by Union Carbide Corporation as a contractor for the Atomic Energy Commission were done by Carbide as an agent or instrumentality of the United States. It is further denied that Carbide never had the beneficial use of such property for its private ends. To the contrary, it is averred that Union Carbide Corporation is presently engaged in business in this State for the purpose of making a profit, and that it has in fact realized from its activities in Tennessee a very handsome profit, which has inured to its benefit and that of its stockholders. Its use of the property in question comprised a very substantial portion of its activities in pursuit of profit, and to that extent it had every whit as much beneficial use of the property employed and applied in the consummation of its contract as does any private contractor operating upon a cost-plus-a-fixed fee basis.

[fol. 24]

XII

Defendant refutes complainants' denial that Union Carbide Corporation was during the period in question exercising a taxable privilege under the Tennessee sales tax statutes. To the contrary defendant asserts that Carbide's activities during the period in question fall squarely within the provisions of this statute, and particularly those provisions hereinbefore alluded to. Defendant likewise denies that Carbide has never procured, used or stored for use or consumption any tangible personal property in connection with its contractual functions so as to create liability under the sales tax statute. Defendant further denies that in the performance of its contract Union Carbide Corporation was not engaged in private business or commercial activity for a profit. To the contrary defendant avers that all of Carbide's activities in Tennessee were for the sole purpose of producing a profit, and that profit-wise its ventures in this State have been highly successful.

Defendant would further show the court that the prior course of conduct on the part of complainants, to the contrary of their instant contention that no taxable privilege has been exercised in Tennessee by Union Carbide Cor-

poration, evidences most clearly that a taxable privilege has been engaged in by Carbide and other concerns performing work for the Atomic Energy Commission at its Oak Ridge installation. Specifically, defendant would show the court that only slightly over a year ago complainants caused to be paid to the Department of Finance and Taxation nearly \$200,000.00 in sales and use taxes for the period of time between the 1953 amendment to Section 9(b) of the Atomic Energy Act and when complainants contrived to alter the purchase order forms employed by Carbide in its acquisitions of property to be used in the fulfillment of its contractual obligations, said alteration being made for the sole purpose of attempting to impart to Carbide the governmental immunity of the [fol. 25] Atomic Energy Commission from taxation.

Responding to complainants' allegation that Union Carbide Corporation's activities do not amount to the exercise of a taxable privilege under Tennessee's sales and use tax statute, defendant would show the court that the United States, through the Atomic Energy Commission, has carried on the activities authorized by the Atomic Energy Act in several other states of the Union having sales and/or use tax statutes identical in material particulars with Tennessee's, and that in some of these states private contractors with the Commission have paid and are paying sales and use taxes without challenge, with the approval, express or implied, of the Atomic Energy Commission.

XIII

Defendant denies that the sales tax statute when properly construed neither necessitates nor authorizes the collection of the sales and use taxes assessed against and collected from Union Carbide Corporation for the month of July 1956, and further denies that it does not authorize assessments and collections of like taxes for any of the period between May 1, 1955 and March 20, 1957. To the contrary defendant avers that the said statute positively requires him to collect taxes imposed with respect to all tangible personal property not specifically exempted which this corporation may have sold at retail, used, consumed, distributed, stored for use, leased or rented as lessee, or otherwise erected or applied during any of the periods in

question here for its own account or pursuant to any type of a contract.

XIV

Defendant denies that if the sales tax statute is construed to require the payment of sales tax by dealers with respect to sales of tangible personal property not specifically exempted to Carbide, such statute is discriminatory, invalid or repugnant to any provision of the state or federal constitutions.

[fol. 26]

XV

Defendant denies that if the Tennessee sales tax statute is construed to be applicable to dealers with respect to sales made to Carbide, such statute is discriminatory or invalid because repugnant to any provision of the state or federal constitutions.

XVI

Defendant denies that if the sales tax statute is construed to be applicable to dealers with respect to sales made to Carbide, such statute is discriminatory or invalid because repugnant to any provision of the state or federal constitutions.

XVI

Defendant denies that if the sales tax statute is construed as requiring the imposition upon and collection of sales or use taxes from Carbide because of the transactions and uses of property described in the original bill, said statute is invalid because repugnant to any provision of the federal constitution. To the contrary defendant avers that it is well established in constitutional law that a state may permissibly tax the operations of a private contractor with the Federal Government in the absence of federal legislation specifically conferring exemption from state taxation upon such contractor or such operation.

XVII

Defendant denies likewise that the said statute, if construed to be applicable to Carbide on account of described transactions and uses of property, is invalid as so applied because repugnant to any provision of the federal constitution.

XVIII

Defendant denies that the assessment by him of sales and use taxes constitutes an assessment of taxes upon the exclusive properties, activities or income of the United States so as to contravene any provision of the Constitution of the United States.

[fel. 27]

XIX

Defendant denies that the assessment against Carbide or the exaction from Carbide of the described taxes serves to impose taxes upon an agent or instrumentality of and for the United States, or that it represents an unconstitutional imposition of such tax upon the United States. To the contrary defendant reiterates that all he has done or sought to do herein is to impose valid taxes in a lawful manner upon a private corporation doing business in this state, and that such action in no wise infringes the sovereign immunity from taxation enjoyed by the United States.

XX

Defendant denies that for the reasons set forth by complainants or for any other reason the assessment against and collection from Carbide of the taxes in question are illegal, contrary to law or void, or that complainants, or either of them, are entitled to recover said taxes or any portion thereof.

XXI

Defendant denies emphatically that the United States is directly or immediately affected by the taxes levied against and collected from Carbide for or in connection with the performance of activities for the Atomic Energy Commission. To the contrary defendant avers that the effect of these taxes upon the United States is indirect and remote, and that if the full impact of such taxes falls upon the United States, it is for the sole reason that the latter has of its own will and volition agreed and undertaken to assume such burden and thus relieve its contractor therefrom. While it is admitted that in this cause government-owned property is in some instances being used

as a measure of taxation, defendant avers that such measure is with reference to the taxation of a privilege enjoyed by a private corporation under the laws of this state and does not in any wise affect the Government or its revenues except to the extent that the Government chooses to be so affected in the framing of its contract with [fol. 28] the Union Carbide Corporation. It is denied that this private corporation is in any wise an agent or instrumentality of the United States so that the effect of taxation of government-owned property furnished to it amounts to the taxation of the United States. It is denied that the moneys are rightfully due and belonging to the United States, or that defendant has illegally or unlawfully demanded or collected them from Carbide.

Defendant would further show the court that prior litigation between these same parties terminated in a decision favorable to complainants in the Supreme Court of Tennessee and the Supreme Court of the United States, solely on account of the provision then appearing in Section 9(b) of the Atomic Energy Act, which provision exempted the Atomic Energy Commission and its properties, activities and income from said taxation, the word "activities" being held to be so broad as to include those things which the Commission undertook or accomplished through private contractors. Subsequent to this litigation, Congress amended the Atomic Energy Act by deleting from Section 9(b) this provision, thereby indicating in clear terms its intent that the private contractors of the Commission pay sales and use taxes to the states wherein they operated. The complainant Union Carbide Corporation then proceeded to pay such taxes to the State of Tennessee until the time when the Commission altered the purchase order forms to be employed by it, and upon the basis of such altered language commenced to claim immunity of its purchases made thereunder from taxation by Tennessee. Defendant would further show the court that sales and use tax have been and are currently being paid to other states having sales and use tax statutes similar to or identical with Tennessee's by private contractors with the Commission such as Carbide, and avers that if such payments are made to other states there is no legal or moral justification for

their not being paid to Tennessee. Defendant would likewise show the court that the State of Tennessee does not [fols. 29-34] collect from Carbide or any other contractor with the Atomic Energy Commission any advalorem property taxes whatsoever, which is not true in most of the other states in which the Commission's activities are conducted, Tennessee, as the court knows, being dependent largely upon its sales and use taxes for general purpose revenue.

All allegations and averments of the original bill not hereinbefore specifically admitted or specifically denied are here and now denied as fully and completely as though dealt with separately.

And now having fully answered defendant prays to be dismissed with his just costs.

George F. McCanless, Attorney General. Allison B. Humphreys, Solicitor General. Milton P. Rice, Assistant Attorney General. Solicitors for Defendant.

[fol. 35] IN THE CHANCERY COURT, PART ONE, OF DAVIDSON
COUNTY, TENNESSEE

80060

UNITED STATES OF AMERICA and UNION CARBIDE CORPORATION,

vs.

B. J. BOYD, COMMISSIONER, ETC.,

and

80061

UNITED STATES OF AMERICA and THE H. K. FERGUSON
COMPANY,

vs.

B. J. BOYD, COMMISSIONER, ETC.

MEMORANDUM OPINION OF CHANCELLOR—Filed September
29, 1961

Since the pleadings, the proof and the briefs in this cause are so full and complete, covering every phase of this litigation, this Court will not attempt to set out the pleadings or the factual situation but will try to dispose briefly of the issues as the Court sees them.

The first question to be disposed of is whether the complainants are independent contractors or agents under their contracts with the A. E. C.

The record clearly shows that the operating relationship between the A. E. C. and the complainants has not been changed. (Center dep. 331 Carbide case, Sapirie dep. 120 Carbide case, and Bonnett dep. 209 Ferguson case.)

Since this same relationship exists, this Court feels that it should follow the ruling in the Carson case; that is, that the complainants are independent contractors. It is interesting to note in the Carson case that even Chief Justice Neil in his dissent, with Justice Prewitt concurring, found the complainants to be independent contractors. Also, in the Livingston case District Judge Timmerman in his dis-

sent found the relationship between Dupont and A. E. C. to be that of an independent contractor.

[fol. 36] The only aspect in which the factual situation of the cases at bar differs from that before the Courts in the Carson case is in the procurement techniques. This Court does not feel that this change in procurement techniques is sufficient to change the relationship as established in the Carson case.

The complainants have used and continue to use tangible personal property in the performance of their contracts with A. E. C., and are therefore subject to be taxed under T. C. A. 67-3003. This tax is nondiscriminatory; and, though the ultimate burden of this tax will fall upon A. E. C., it is because A. E. C. so agreed with complainants. (Esso Standard Oil Co. vs. Evans, 345 U. S. 495.)

Since there is no express statutory exemption, the complainants have no right to claim an exemption from the tax in question.

Complainants' bills should be dismissed at their cost.
Decree accordingly.

Ned Lentz, Chancellor.

This September 29, 1961.

[fol. 37] IN THE CHANCERY COURT, PART ONE OF DAVIDSON
COUNTY, TENNESSEE

No. 80060

UNITED STATES OF AMERICA and UNION CARBIDE CORPORATION,

v.

B. J. BOYD, COMMISSIONER, ETC.

and

No. 80061

UNITED STATES OF AMERICA and THE H. K. FERGUSON
COMPANY,

v.

B. J. BOYD, COMMISSIONER, ETC.

FINAL DECREE—January 8, 1962

These consolidated causes came to be heard upon this the 8 day of January, 1962, and prior days upon the original bills, the answers of defendant thereto, depositions of witnesses, stipulations of fact, oral arguments and briefs of counsel, and the entire record, from all of which the Court is of the opinion that complainants Union Carbide Corporation and The H. K. Ferguson Company are independent contractors with the Atomic Energy Commission of the United States, and as such are liable for the Tennessee sales or use tax with respect to the tangible personal property procured or used by them in the performance of their contracts or the fulfillment of their contract obligations, for reasons more specifically set forth in a memorandum opinion dated September 29, 1961, which opinion is incorporated herein and made a part of the record in these causes.

It is accordingly, Ordered, Adjudged and Decreed that complainants are not entitled to recover the amounts paid by them under protest to the Commissioner of Revenue of the State of Tennessee, and that their bills be and the same

are hereby dismissed with costs, for which execution may issue, except that there shall be no execution as to the United States of America.

[fols. 38-43] From all of which complainants except and pray appeals to the next term of the Supreme Court of Tennessee sitting at Nashville, which appeals are by the Court granted. To perfect their appeals, however, the complainants Union Carbide Corporation and The H. K. Ferguson Company shall file appeal bonds as provided by law but it shall not be necessary for the United States of America to file any appeal bond.

It is ordered by the Court that all exhibits on file in these causes, including the public documents, shall be sent up to the Supreme Court by the Clerk and Master in their original form in the event an appeal is perfected.

Approved for Entry:

R. R. Kramer, Kramer, Dye, McNabb & Greenwood, Solicitors for Union Carbide Corporation and The H. K. Ferguson Company. Kenneth Harwell, United States District Attorney, Middle District of Tennessee, Solicitor for United States of America. George F. McCanless, Attorney General. Milton P. Rice, Assistant Attorney General. Walker T. Tipton, Assistant Attorney General, Solicitors for Defendant.

[fol. 44] IN THE SUPREME COURT OF TENNESSEE

UNITED STATES AND UNION CARBIDE CORPORATION

VS.

B. J. BOYD, COMMISSIONER

ASSIGNMENT OF ERRORS

First: The learned Chancellor erred in finding and holding that Union Carbide Corporation was an independent contractor under its contract with the Atomic Energy Commission.

(Tr. pp. 35-38).

The appellant, Union Carbide Corporation, was prejudiced by the holding referred to in this assignment and by the failure of the Court to hold that the Corporation was the agent of the Federal Government engaged in the exercise of a privilege on behalf of the Federal Government in the performance of activities of the Atomic Energy Commission and hence constitutionally immune from State taxation. This erroneous holding resulted in denying to this appellant immunity from the taxes involved in this litigation, to which immunity it was entitled.

Second: The learned Chancellor erred in finding and holding that the taxes here involved, which were levied under T.C.A., Section 67-3003, are non-discriminatory in their application to procurements and uses of tangible personal property pursuant to and under the contracts here involved.

(Tr. pp. 35-38).

The appellant, Union Carbide Corporation, was prejudiced by the holding referred to in this assignment and by the failure of the Court to hold that the taxes claimed operate so as to discriminate against the Federal Government and those with whom it deals. This is especially true inasmuch as the Statute involved singles out vendors who sell to the United States and imposes upon them an obligation to pay the Tennessee Retailers' Sales Tax but such obligation is not imposed upon vendors who sell to the State of Tennessee or its political subdivisions nor is it imposed

upon vendors who sell to certain other organizations which the Statute exempts from payment of the tax.

[fol. 45] Third: The learned Chancellor erred in finding and holding that the appellant, Union Carbide Corporation, is liable for the payment of the taxes here involved. This holding creates an arbitrary, capricious and unreasonable classification of taxpayers under the Tennessee Retailers' Sales Tax Act and hence places the Statute in violation of the equal protection clauses of the Federal Constitution and of the Constitution of the State of Tennessee.

As a result of the holding herein referred to the Statute singles out vendors who sell to the United States and imposes upon them an obligation to pay the Tennessee Retailers' Sales Tax but such obligation is not imposed upon vendors who sell to the State of Tennessee or its political subdivisions nor is it imposed upon vendors who sell to certain other organizations which the Statute exempts from payment of the tax.

Fourth: The Tennessee Retailers' Sales Tax Act does not tax use per se of tangible personal property and a non-owner of tangible personal property must have a separable and beneficial use thereof, different from the kind of use here involved, in order for such use to be subject to tax under this Statute. Hence the learned Chancellor erred in holding that the appellant, Union Carbide Corporation, is subject to the tax here involved.

This record discloses that the only use of the tangible personal property which is the basis upon which the tax herein claimed is asserted to be an obligation of this appellant was a use made in connection with the performance of its Atomic Energy Commission contract.

Inasmuch as all the activities of this appellant, in which activities the uses of such personal property were had, were carried out in the performance of a public duty mandatorily required by an Act of Congress, such use did not constitute a taxable use under the Tennessee Retailers' Sales Tax Act.

[fol. 46] Fifth: The learned Chancellor erred in finding and holding that there is no express statutory exemption in the Tennessee Retailers' Sales Tax Act covering the purchases and uses of the tangible personal property here

involved, and therefore the appellants cannot successfully assert exemption from the tax in question.

(Tr. p. 36).

This holding of the Court was erroneous because the record clearly establishes that the sales involved insofar as Union Carbide Corporation is concerned were made to the United States as the real purchaser and therefore such sales were within the express exemption contained in T.C.A., Section 67-3004.

[fol. 47] IN THE SUPREME COURT OF TENNESSEE

Davidson Equity

UNITED STATES OF AMERICA and UNION CARBIDE CORPORATION,

versus

B. J. BOYD, COMMISSIONER.

and

UNITED STATES OF AMERICA and THE H. K. FERGUSON
COMPANY,

versus

B. J. BOYD, COMMISSIONER.

Honorable Ned Lentz, Chancellor

[fol. 48] OPINION—Filed December 7, 1962

These two cases were consolidated and heard by the Chancellor and we shall render one opinion applicable to both cases. These suits were brought to recover certain taxes paid under protest, the taxpayers contending that they are not liable for Sales and Use Taxes under the Tennessee Retailers' Tax Act as amended. The Chancellor held the appellants were not entitled to recover and dismissed the suits. Appeals have been perfected and five

assignments of error are directed to the action of the Chancellor in his order of dismissal.

[fol. 49] In the year 1958 Union Carbide Corporation, called Carbide in this opinion, paid under protest the sum of \$71,376.36 to the State of Tennessee and appellant, H. K. Ferguson Company, called Ferguson, paid under protest the sum of \$12,107.52, both sums asserted by the appellee to be due and owing for Sales and Use Taxes for the month of July, 1956. Upon the payment of said sums each appellant, joined by the United States of America as a co-complainant, brought suit to recover the taxes. The briefs filed by the parties indicate that more than \$4,000,000.00 is involved at the present.

It is contended by the appellants that (1) Carbide and Ferguson are agents and not independent contractors of the United States Government; (2, 3) that the taxes imposed are unreasonable and arbitrary and discriminate against the Federal Government; (4) that the Act does not tax use per se of tangible personal property; and (5) that the appellants are expressly exempt from the Sales Tax by virtue of Section 67-3004 T.C.A.

The facts of both suits are rather involved. The appellants contend that they are not liable for the Sales or Use Tax on tangible personal property used by them at Oak Ridge, Tennessee, pursuant to contracts with the Atomic Energy Commission.

[fol. 50] The history and background of the Oake Ridge complex and the contract with Carbide was set forth in detail in an earlier case of Carbide & Carbon Chemical Corporation v. Carson, 192 Tenn., 150, at pages 155-159 and, therefore, we do not think it necessary to repeat the same in full here. It is sufficient to say that in 1943 Carbide entered into a contract with the United States Government for the performance of certain experimental and production work at Oak Ridge as a part of a national research and development program whose immediate objective was the development of the atomic bomb.

In 1947 this contract was transferred to the Atomic Energy Commission (A.E.C.) and, as modified by certain supplemental agreement, was in force during the period material to this litigation. Under this contract, Carbide's responsibilities were the management, operation and main-

tenance of the gaseous diffusion plant, a processing plant for Uranium-235; the Oak Ridge National Laboratory, a nuclear research center; and other important A.E.C. facilities.

The contract was one of many so-called "management contracts" utilized by the A.E.C. to provide the technical and managerial "know-how" needed by the Government in such a large-scale industrial undertaking.

[fol. 51] The contract with Ferguson was made in 1956. In this contract Ferguson agreed to perform various and unspecified construction-type activities for the A.E.C. at Oak Ridge, including the building of some new facilities as well as the modification of existing facilities. Such a contract was necessitated by the rapidly changing needs for modifications of the facilities at Oak Ridge that required construction on short notice and adaptability to changes even during the course of a particular construction job.

In many respects the A.E.C. contracts with Carbide and Ferguson are identical, and both are cost-plus-fixed-fee arrangements. The important details of these two contracts will be discussed in this opinion.

We consider the major assignment of error in these consolidated cases to be:

"The Chancellor erred in holding that Carbide & Ferguson were independent contractors under their contracts with the Atomic Energy Commission."

In support of this assignment the appellants contend they are agents of the Federal Government engaged in the exercise of a privilege on behalf of said Government. There- [fol. 52] fore, they claim to be immune from state taxation by virtue of Article VI, Clause 2 of the Constitution of the United States, commonly called the "Supremacy Clause", as interpreted in a line of decisions beginning with *M'Culloch v. Maryland*, 17 U.S. (4 Wheat) 316, in which Chief Justice John Marshall denied that the State of Maryland could impose a tax on an instrumentality of the United States stating that:

"The States have no power, by taxation or otherwise, to retard, impede, burden, or in any manner

control, the operations of the constitutional laws enacted by Congress to carry into execution the powers vested in the general government. This is, we think, the unavoidable consequences of that supremacy which the Constitution has declared."

The argument advanced on behalf of the appellants is that as agents of the Government any tax upon them is a direct tax upon the Government and they are, therefore, within the implied immunity of the Federal Government from state taxation. On the other hand, the appellee vigorously contends that the relationship of appellants with the A.E.C. is that of independent contractors as was held to be the case in a very similar situation in *Carbide & Carbon Chemical Corporation v. Carson*, *supra*.

[fol. 53] As late as 1936 the United States Supreme Court adhered to a doctrine of absolute immunity, holding that if one sovereign is not subject to direct taxation by another, it also did not have to pay taxes indirectly, as by sales tax levied on private contractors doing business with the Government. *Graves v. Texas Co.*, 298 U.S. 393.

The first change in this attitude appeared in the decision in *James v. Dravo Contracting Company*, 302 U.S. 134, handed down in 1937. In that decision a West Virginia sales tax levied on a contractor working for the U.S. was held valid, the Court holding that the contractor was not an instrumentality of the United States and that a tax upon the contractor was not a tax on the Government or its property. Thus simply doing business as contractor with the United States no longer gave immunity.

In 1941, the Court expressly overruled the *Graves* case, *supra*, and announced a marked change in the immunity decisions in *Alabama v. King & Boozer*, 314 U.S. 1, and the companion case of *Curry v. United States*, 314 U.S. 14. In the first case *King & Boozer* sold supplies to a cost-plus-fixed-fee government contractor for use in the performance of its contract. The State of Alabama asserted a sales tax which was unanimously upheld by the U.S. Supreme Court, holding that the contractor was not a purchasing agent for the Government, but was a purchaser in

his own name with only the right to be reimbursed under the contract. The Court stated:

[fol. 54] "So far as such a nondiscriminatory state tax upon the contractor enters into the cost of the materials to the Government, that is but a normal incident of the organization within the same territory of two independent taxing sovereignties. The asserted right of the one to be free of taxation by the other does not spell immunity from paying the added costs, attributable to the taxation of those who furnish supplies to the Government and who have been granted no tax immunity.

"They (the contractors) were not relieved of the liability to pay the tax either because the contractors in a loose and general sense were acting for the Government in purchasing the lumber or, as the Alabama Supreme Court seems to have thought, because the economic burden of the tax imposed upon the purchaser would be shifted to the Government by reason of its contract to reimburse the contractors."

In the companion case of *Curry v. United States* the same reason was applied as the Court unanimously upheld an Alabama use tax on material purchased by the contractor outside of Alabama. There the Court emphasized again that "the Constitution, without implementation by Congressional legislation, does not prohibit a tax upon Government contractors because its burden is passed on economically [fol. 55] cally by the terms of the contract or otherwise as a part of the construction cost to the Government." 314 U.S., 14, 18.

Thus in *Dravo and King & Boozer*, the Court specifically rejected the earlier "economic burden" test for immunity and replaced it with what has frequently been called the "legal incidence" test. By the latter, if the incidence of a tax is directly upon the U.S. or its agents, it is invalid by implied immunity, while any indirect tax is valid. Under this test the question of agent versus independent contractor becomes decisive.

Ten years after the Alabama cases, this Court was

squarely faced with the same question in *Carbide & Carbon Chemical Corporation v. Carson*, supra, in which the Tennessee Sales and Use Taxes were asserted against certain A.E.C. contractors at Oak Ridge, one of whom was the appellant, Carbide in the instant case. In that case the Court said:

"The distinctions between an independent contractor and an agent are not always easy to determine, and there is no uniform rule by which they may be differentiated. 'Generally the distinction between the relation of principal and agent and employer and independent contractor is based on the extent of the control exercised over the employee in the performance of his [fol. 56] work, he being an independent contractor if the will of the employer is represented only by the result, but an agent where the employer's will is represented by the means as well as the result.'" (Citing, 2 C.J.S., Agency, Section 2, p. 1027.)

"The distinction generally between an independent contractor and an agent 'depends upon the intention of the parties as expressed in the contract,' " (page 160).

After a thorough study of the contracts and the facts involved, this Court held that the parties were independent contractors and were without constitutional immunity, but we also held that they were expressly immune from the taxes under the Atomic Energy Act of 1946, Sec. 94(b), 42 U.S.C.A., Sec. 1809(b), which provided that the "activities" of the A.E.C. were exempted from taxation in any manner or form by any state or any subdivision thereof.

The U. S. Supreme Court affirmed on the basis of the Atomic Energy Act and, therefore, did not consider the question of implied immunity and relation of the parties. 342 U.S. 232 (1952).

[fol. 37] In many of these cases the Court recognized that Congress could grant express immunity where it chose to do so. An expression of Congressional intent soon followed the Carson case when the legislative branch of the Federal Government amended the Atomic Energy Act by deleting the express immunity granted to A.E.C. "activities". The

Senate Report accompanying this legislation reads, in part, as follows:

"The purpose of this legislation is to amend the Atomic Energy Act of 1946, as amended, by striking the last sentence of section 9(b) thereof which, as interpreted by the courts, affords to the Commission, and its contractors, an exemption from State and local taxation broader in scope than that generally enjoyed by all other departments and agencies of the Federal Government, and to place the Atomic Energy Commission on a basis identical to that of the rest of the Federal Government with respect to such taxation."

Thus Congress, mindful of the Federal-State relationship and desirous of maintaining State financial independence, quickly expressed an intent that the A.E.C. would be granted no greater immunity than other federal departments and agencies.

[fol. 58]. Within a few months after this congressional action, the U.S. Supreme Court handed down its decision in the case of *Kern-Limerick, Inc. v. Scurlock*, 347 U.S. 110 (1954). In many respects this case was closely similar to the *King & Boozer* case. It involved private contractors in a joint venture who purchased two tractors in Arkansas for use in connection with their contract to build a naval ammunition depot. Arkansas levied a sales tax on the vendor, Kern-Limerick, who sued to recover the taxes. In striking down the taxes as invalid, the U.S. Supreme Court distinguished the case from *King & Boozer* in the following significant language:

"The contract here in issue differs in form but not in economic effect on the United States. The Nation bears the burden of the Arkansas tax as it did that of Alabama. The significant difference lies in this. Both the request for bids and the purchase order, in accordance with the contract arrangements making the contractors purchasing agents for the Government, contain this identical, specific provision:

"This purchase is made by the Government. The Government shall be obligated to the vendor for the purchase price, but the Contractor shall handle all payments hereunder on behalf of the Government. The

vendor agrees to make demand or claim for payment of the purchase price from the Government by sub-[fol. 59] mitting an invoice to the Contractor. Title to all materials and supplies purchased hereunder shall vest in the Government directly from the Vendor. The Contractor shall not acquire title to any thereof." 347 U.S. 110, 119-120.

The Court then stated that it found the purchaser under this contract was the United States and ruled that King & Boozer was not controlling for, though the Government also bore the economic burden of the state tax in that case, the legal incidence of that tax was held to fall on the independent contractor and not upon the United States.

The Court in that case also said:

"Since purchases by independent contractors of supplies for Government construction or other activities do not have federal immunity from taxation, the form of contracts, when governmental immunity is not waived by Congress, may determine the effect of state taxation on federal agencies, for decisions consistently prohibit taxes levied on the property or purchases of the Government itself." 347 U.S. 110, 122-123.

[fol. 60] The general distinction then between these two cases is the finding of an agency relationship between the Government and the contractor for the purchase of materials in the Kern-Limerick case. This finding was based upon (1) the terms of the contract, (2) the terms of the purchase orders, and (3) the actual practice of the Navy to exercise its reserved right to approve each request for bids and each purchase. Emphasis was given to the form of the contract and purchase orders; and any motive to avoid taxation by employing the form used was held immaterial. Thus the Kern-Limerick case has been called the "outer limit" of the King & Boozer case.

This summary of the decisions has not been exhaustive, nor is the Kern-Limerick case the latest pronouncement on the subject, but it does outline the major steps in recent years. Other cases will be referred to as they apply to the questions presented.

We will now consider the facts and arguments in view of the foregoing background with respect to first the Sales Tax and then the Use Tax. The significance of this separation will appear subsequently. In determining whether or not the Sales Tax applies, it appears that in view of the King & Boozer and the Kern-Linnerick cases the question of whether or not these appellants are agents or independent contractors of the A.E.C. appears controlling in considering the validity of the Sales Tax asserted. We shall now proceed to examine the contracts and the procurement [fol. 61] methods practiced by the parties. A determination of their intentions expressed therein is necessary for this purpose.

The Carbide contract was supplemented by Agreement No. 37 in June, 1956. It was in effect, a complete re-write of the earlier contract for the purpose of "more clearly reflecting the intent and objectives of the agreement." Carbide states in its brief that this new contract in no way changed the method of operation between the parties. The parts of the contract here pertinent are these. Carbide is charged with the duty of procuring many materials, supplies, and services. It is to exert its best efforts to acquire materials, supplies, equipment and facilities necessary in the performance of the contract, but the Government retains the right to furnish any of these. It is to be reimbursed for all allowable costs. Payment for allowable costs is to be made with funds advanced by the Government by means of a special bank account. The corporation is not to use its own funds in these procurements. Title to all property passes directly from the vendor to the U.S. Government. These contract provisions appear to be identical with those in effect as early as 1950 or earlier.

Some changes were made in Carbide's purchase operations and order forms in 1954, that is, after the decision in the Kern-Limerick case. Payment is now made with Government funds whereas before the corporation was merely reimbursed. Terms and conditions conforming in many respects with those in the Kern-Limerick decision [fol. 62] were added to the order form. At least four types of order forms are used, but no need is seen for distinguishing these. When purchases are made by Carbide the

following is included among the terms and conditions attached to the order:

"It is understood and agreed that this Order is entered into by the Company for and on behalf of the Government; that title to all supplies furnished hereunder by the Seller shall pass directly from the Seller to the Government, as purchaser, at the point of delivery; that the Company is authorized to and will make payment hereunder from Government funds advanced and agreed to be advanced to it by the Commission, and not from its own assets, and administer this Order in other respects for the Commission, unless otherwise specifically provided for herein; that administration of this Order may be transferred from the Company to the Commission or its designee, and in case of such transfer and notice thereof to the Seller the Company shall have no further responsibilities hereunder and that nothing herein shall preclude liability of the Government for any payment properly due hereunder if for any reason such payment is not made by the Company from such Government funds."

[fol. 63] The property was to be shipped to the A.E.C. in care of Carbide. Nowhere in the contract or the purchase order forms is there specific mention of "agency" and with the exception of the above quoted term or condition, the order would have every appearance of being from the Company for itself.

Carbide was generally free to make purchases up to \$100,000.00 without prior approval, although this was not true with regard to certain specific items or materials named in the contract.

The Ferguson contract appears to be in every respect identical with that of Carbide in regard to the procurement of materials as shown above.

The procedure and order forms used by Ferguson in purchasing the property herein involved are identical to those of Carbide, except that Ferguson is limited to purchases of \$10,000.00 or less without prior A.E.C. approval.

In the King & Boozer case, the important factors in hold-

ing that no agency existed and, therefore, upholding the sales tax, were that title passed first to the contractor and that the contractor could not bind the Government. In the instant case neither is true. Here, as in Kern-Limerick, the purchase orders specify that title passes to the Government, that payment is with Government funds, and that the Government is bound by the orders.

[fol. 64] The distinguishing factors from Kern-Limerick are that here, as the appellee contends, many purchases are without prior approval and no specific use of the term "agency" or "purchasing agent" appears.

The decision of agency or lack of agency does not necessarily rest on these latter decisions. The mere placing of terms such as agent or independent contractor in the contract does not make them such in law. The surrounding facts and circumstances determine the relationship.

It appears from the contract and from the actions of the parties that the relationship of agency in so far as the purchase of materials are concerned when accomplished in accordance with the contract bring them within the holding of Kern-Limerick and under that case the A.E.C. is the purchaser. Therefore, the Sales Tax would be a direct tax upon the Government and is invalid under the doctrine of implied immunity, and we so hold.

Next the question of agency or independent contractor is equally important to a determination of the legal incidence of the Use Tax. It is the contention of the appellants that they are not only purchasing agents under their contracts, as we have been compelled to conclude, but that their whole relation to the A.E.C. under the contracts is that of agency. As agents, they argue that they are immune from state taxation of any privilege they exercise in the performance of their contracts.

[fol. 65] The appellee again contends that in the general performance of the contracts, the appellants are independent contractors, even if they are agents of the A.E.C. for purchasing purposes.

To determine this question it is necessary to look more fully at the contracts in general.

Article I of the Supplemental Agreement No. 37 with Carbide provides:

"The Government expressly engages the Corporation to manage, operate and maintain the plants and facilities described below, and to perform the work and services described in this contract, including the utilization of information, material, funds, and other property of the Commission, the collection of revenues, and the acquisition, sale or other disposal of property for the Commission, subject to the limitations as hereinafter set forth. The Corporation undertakes and promises to manage, operate, and maintain said plants and facilities and to perform said work and services, upon the terms and conditions herein provided and in accordance with such directions and instructions [fol. 66] not inconsistent with this contract which the Commission may deem necessary or give to the Corporation from time to time. In the absence of applicable directions and instructions from the Commission, the Corporation will use its best judgment, skill and care in all matters pertaining to the performance of this contract."

The introductory paragraphs of the contract state that:

"Such agreement arose out of the need for the services of an organization with personnel of proved capabilities, both technical and administrative, to manage and operate certain facilities of the Commission and to perform certain work and services for the Commission, and the Commission recognizes the Corporation as an organization having such personnel, and that the initiative ingenuity and other qualifications of such personnel should be exercised in providing such services under the agreement, to fullest extent practicable. . . ."

[fol. 67] As indicated above, the contract with Ferguson states that it was necessitated by the need for rapid construction or modification of facilities at Oak Ridge. To prevent loss of time the A.E.C. entered into a general con-

struction contract with Ferguson. At intervals not less frequent than six months, the parties were to negotiate supplemental agreements showing precisely what work had been done and fixing Ferguson's fee.

Under each contract, Carbide and Ferguson had the responsibility for hiring their own employees and administering their own contracts, though sub-contracting by Ferguson was subject to some control. Each was advanced funds from which to pay allowable costs, and each received a fixed fee for its performance.

Under the contract the A.E.C. retained the right of approval of certain employees and the right to require dismissal of employees deemed incompetent, careless, insubordinate, or whose employment was inimical with the public interest.

Under Carbide's contract, the A.E.C. controlled the amount of materials to be processed, exercised various controls over special nuclear materials, and approved the type and extent of research work done.

In connection with Ferguson's contract, the A.E.C. handled architect and engineer work separately and controlled [fol. 68] the scheduling of specific jobs.

As to both Carbide and Ferguson, the A.E.C. further controlled budgets and financial plans, required detailed accounting, and regulated health and safety procedures.

Looking at the facts presented by this record and at the contracts negotiated by the parties and their intent expressed therein, we have arrived at the same conclusion as we did in the earlier case of Carbide and Carbon Chemical Corporation v. Carson, *supra*, in which the Court said:

"The nature of the plant operation is such that the government does not have on its staff or in its employ the technical means of qualifications to operate the plant. Each of the production plants is operated by a contractor who has considerable experience in the industrial operation of a chemical separation plant and Gaseous Diffusion plants, electromagnetic separation plants, etc. . . .

"We must hold that after making a rather thorough study of the contracts . . . and the facts developed in this record that these contractors are independent contractors."

[fol. 69] This does not mean that the Carson case is controlling here, but simply that the same conclusion has been reached for the same reasons.

It is clear from this voluminous record in the instant case that many controls are exercised by the A.E.C. over these appellants. The agency argues that the number and extent of these controls clearly indicate an agency relationship. It is, however, the nature of the controls which determines their effect.

Our examination of the record indicates that many of the controls enumerated by the appellants are nothing more than specifications for the "end result". Others are necessitated by the monopoly in atomic development and the duty to regulate the use of nuclear raw materials vested in the A.E.C.; the need for maximum security; the need for coordination of the Oak Ridge Operation with other A.E.C. projects, and the need for strict accounting for the use of public funds. These factors dictate extensive controls, yet within the framework of these controls the contractors remain independent in the sense that they are free to utilize their own experience and initiative in achieving the objectives or in the result of the Commission. In fact, the A.E.C. lacks the man power and facilities to perform these functions, and it is for this reason it entered into the contracts in question.

The A.E.C. chose to carry out its responsibilities by entering into contracts with private companies, thereby utilizing the extensive technical and managerial skills of these companies in an industrial type activity larger than [fol. 70] any previously undertaken by the Government. In the beginning these qualifications were unavailable among Government personnel. The use of private contractors has proven successful and the A.E.C. has elected to continue these relationships.

The record shows that the contract with Ferguson, a long-term contract with one construction company, was made only to allow construction in the least possible time. Just as was Carbide, Ferguson was chosen for its experience and "know-how" in its field and is free to utilize these skills to accomplish the objectives of the A.E.C.

The appellants argue strongly that we are bound to find an agency relationship under our decision in Roane-Andér-

son Co. v. Evans, 200 Tenn., 373. That case, however, is not controlling here. It did involve a similar contract with the A.E.C. at Oak Ridge, but that contract repeatedly used the term "agent" in describing the relation of the parties. We held that we were not bound by that term but could look beyond it in determining the relation. Furthermore, the tax involved in that case was a gross receipts tax. We held that the receipts collected by Roane-Anderson belonged to the U.S. Government and, therefore, no tax could be levied directly on those funds.

[fol. 71] The main contention of the appellants is that we are bound by the decision of the U.S. District Court in United States v. Livingston, 179 Federal Supp. 9, affirmed without opinion, — U.S. — (1959). That case involved a South Carolina sales and use tax upon DuPont Corp. in its operations under a similar contract with the A.E.C. We are not persuaded that the holding of that case should be followed here, because both in the facts and the South Carolina and Tennessee taxing statutes substantial differences appear. There DuPont undertook to design, construct, and operate a plant for the A.E.C. for a fee of only \$1.00. The Court in that case found that DuPont entered the contract from motives of public responsibility, and that it was the intention of the parties that DuPont would act as agent or "alter ego" of the A.E.C. in that project. The Court concluded that DuPont itself lacked a separate taxable interest.

We do not wish to ignore any patriotic motives that may exist, but we find in this record no indication that the appellant Carbide continues its contract or that appellant Ferguson entered its contract with any primary motive other than that of the normal business transaction. Carbide's yearly fee, above allowable costs, is \$2,751,000.00 and Ferguson's fee, negotiated from time to time, is equally substantial as it appears in the supplemental agreements to the Ferguson contract. In addition, we feel that Carbide, contrary to DuPont in the Livingston case is deriving substantial indirect benefit that will enable it to maintain a [fol. 72] position of industrial leadership as atomic energy finds more uses in non-defense fields.

After a very careful and thorough study of the contracts and the facts in this case, we conclude that both Carbide

and Ferguson are independent contractors in the general performance of their contracts, though we are compelled, for the reasons shown above, to conclude that they have both been constituted agents for the special function of purchasing or procuring materials under their contracts.

Having decided that, except in the purchase of property, the appellants occupy a position as independent contractors of the A.E.C., the question remains whether the use tax is applicable to them.

In 1955 the Tennessee Retailers' Sales Tax Act was substantially amended by Chapter 242. Prior to that time the use tax in this State was the customary complement to the sales tax which prevented evasion of the sales tax through importation of property from without the state. The 1955 amendments changed this by also taxing use by contractors as a privilege irrespective of the title of the property or its importation. T.C.A., 67-3004, paragraph 2 provides:

"Where a contractor or subcontractor hereinafter defined as a dealer, uses tangible personal property in the performance of his contract, or to fulfill contract [fol. 73] or subcontract obligations, whether the title to such property be in the contractor, subcontractor contractee, subcontractee, or any other person, or whether the title holder of such property would be subject to pay the sales or use tax, except where the title holder is a church and the tangible personal property is for church construction, such contractor or subcontractor shall pay a tax at the rate prescribed by Section 67-3003 measured by the purchase price or fair market value of such property, whichever is greater, unless such property has been previously subjected to a sales or use tax, and the tax due thereon has been paid."

See also T.C.A. 67-3017, paragraph 11, of which states:

"The term 'dealer' is further defined to mean any person who uses tangible personal property, whether the title to such property is in him or some other entity, and whether or not such other entity is required to pay a sales or use tax, in the performance of his contract or to fulfill his contract obligations, unless

such property has previously been subjected to a sales or use tax, and the tax due thereon has been paid."

[fol. 74] The effect of these amendments is strongly challenged by the appellants. One contention is that the Act, as amended, does not tax use per se and does not tax the activities of Carbide and Ferguson described herein. Under their construction of the Act, the use tax therein is nothing more "than the conventional complementary use taxes".

Such a construction, however, leaves the 1955 amendments without any force. We do not believe that they were intended as superfluous language or that the Legislature intended to do an idle thing by adopting said amendments. They expressly impose a tax upon the privilege of use by a contractor of tangible personal property, regardless of the title, where such property has not previously borne a sales or use tax.

In T.C.A. 67-3004 a contractor is defined as a "dealer" which is further defined to be a person who uses tangible personal property, whether the title is in him or in another and whether the other has immunity or not in performing his contract, unless the property has borne such a tax. We think this was intended to be and is a tax upon the use per se by such a contractor.

It is complementary to the other provisions of the Act in that it places such a contractor on an equal basis with those who use property which has borne this privilege tax. It prevents private independent contractors from escaping the privilege tax merely because the property used in this private capacity was immune from such a tax when purchased by the Federal Government or its agent. It recognizes that in using the property, the contractor is not different from other private contractors.

[fol. 75] The appellants cite examples in the Rules promulgated under the Act which they say exempt use similar to their use of the property in question. The cited instances (such as that a jeweler is not subject to a use tax on a watch when he repairs it) are distinguishable because the exemptions therein are what is commonly known as labor or service charges which are not taxed under this Act. The Rules clearly contemplate that parts replaced

and property, such as tools, used in the work shall bear the sales or use tax.

The remaining contentions of the appellants on this point argue in substance that a tax on their use of the property involved is a tax on use by the Government and is thereby unconstitutional. We think that this contention is fully met by our conclusion that the appellants are independent contractors and not agents. Thus the tax is on their private use for their own profit and gain, and not a tax directly upon the Government.

The tax appears to us to be similar in many respects to that upheld by the U.S. Supreme Court in *United States v. Detroit*, 355 U.S. 466, and the companion Michigan cases, *Detroit v. Murray Corp.*, 355 U.S. 489, and *United States v. Township of Muskegon*, 355 U.S. 484.

[fol. 76] In *United States v. Detroit*, a Michigan property tax was asserted where exempt Government property was leased to a private contractor for use in its business for profit. In upholding the tax the Court said:

“‘Actual possession and custody of Government property nearly always are in someone who is not himself the Government but acts in its behalf for its purposes. He may be an officer or an agent or a contractor. His personal advantages from the relationship by way of salary, profit, or beneficial personal use of the property may be taxed as we have held.’

“‘Here we have a tax which is imposed on a party using tax-exempt property for its own ‘beneficial personal use’ and ‘advantage.’” 355 U.S. 466, 471-72.

In discussing the measure of the tax the Court said:

“‘Nevertheless the Government argues that since the tax is measured by the value of the property used it [fol. 77] should be treated as nothing but a contrivance to lay a tax on that property. We do not find this argument persuasive. A tax for the beneficial use of property, as distinguished from a tax on the property itself, has long been a commonplace in this country. In measuring such a use it seems neither irregular nor extravagant to resort to the value of the property used;

indeed no more so than measuring a sales tax by the value of the property sold. . . .

"A number of decisions by this Court support this contention. For example in *Curry v. United States*, 314 U.S. 14, we upheld unanimously a state use tax on a contractor who was using government-owned materials although the tax was based on the full value of those materials. . . ." 355 U.S. 466, 470;

In *United States v. Township of Muskegon*, the same tax was upheld where the contractor was using the property in the performance of contracts with the Government.

A fortiori we think that a tax upon the privilege of use by a private contractor is not a direct tax upon the Government. Nor do we think that the fact that these appellants [fol. 78] are cost-plus-fixed-fee contractors makes their use any less beneficial and advantageous to them.

The appellants also contend that any use by them is within the express exemption of T.C.A. 67-3004, which states:

"Provided, further, that notwithstanding Section 67-3018, no sales or use tax shall be payable on account of any *direct* sale or lease of tangible personal property to the United States, or any agency thereof created by congress, for consumption or use *directly by it through its own government employees.*" (Emphases supplied.)

This language contemplates direct sales to the Federal Government under customary procurement and fiscal procedures and the use of property directly by Government employees. By no stretch of the imagination can appellants be considered "employees" of the Federal Government. We hold this statutory exemption has no application to the facts of the cases at bar.

Finally, the appellants contend that the tax imposed discriminates against those who deal with the U. S. Government and, therefore, against the Government itself. They argue that the State of Tennessee and its subdivisions are treated more favorably than the Federal Government. (We do not consider their contentions as to the sales tax since

[fol. 79] we have held that their purchases are immune.) Viewing the entire Act, we find this contention is without merit. All direct sales to or use by the Government or its agents are expressly exempt. The exemption afforded the State and its subdivisions is no broader. T.C.A. 67-3012 provides only that:—"There shall also be exempted all sales made to the state of Tennessee or any county or municipality within the State."

The sole exceptions to the use tax here in question are where a contractor uses church-owned property under a contract for church construction and where a contractor uses state or federally owned property in the construction of electric generating plants. T.C.A. 67-3004. Clearly this cannot be said to discriminate against the Federal Government. See *U. S. of America and Olin Mathieson Chemical Corporation v. Illinois Department of Revenue*, 202 F. Supp. 757, affirmed without opinion — U.S. — (1962.) In fact, the A.E.C. contractors receive more favorable treatment because use by them of atomic weapons parts, source materials, special nuclear materials, and by-product materials, as defined by the Atomic Energy Commission Act of 1954, is expressly exempted by T.C.A. 67-3004.

With the exceptions named above, the tax attempts to equate all of those who have a private beneficial use of exempt property with those who use non-exempt property in the same manner. We do not think it is arbitrary or discriminatory.

[fols. 80-81] Consistent with the foregoing, we find that the appellants are purchasing agents for the A.E.C. and, as such, their purchases are exempt from the Sales Tax because they are purchases by the Government. In the general performance of their contracts we find they are independent contractors, and, as such, are taxable on their private use of government-owned property.

After a full consideration of all of the assignments of error, we conclude that the order of the Chancellor in dismissing these cases is correct; therefore, his action in so doing is affirmed at the cost of the appellants.

Weldon B. White, Justice.

[fols. 82-83] IN THE SUPREME COURT OF TENNESSEE

No. 37,558, Davidson Equity

UNITED STATES OF AMERICA AND UNION CARBIDE CORPORATION,

v.

B. J. BOYD, COMMISSIONER.

Affirmed.

JUDGMENT—December 7, 1962

This cause coming on to be heard upon a transcript of the record from the Chancery Court of Davidson County, assignments of error, reply brief and argument of counsel, upon consideration whereof the Court is of opinion that in the decree of the Chancellor there is no error.

It is therefore ordered and decreed by the Court that the decree of the Chancellor be in all things affirmed and that the cause be dismissed.

All the cost of the cause will be paid by Union Carbide Corporation, Principal; and R. R. Kramer and Jackson C. Kramer, Sureties; for which let execution issue.

[fol. 84] IN THE SUPREME COURT OF THE STATE OF
TENNESSEE

No. 37,558, Davidson Equity

UNITED STATES OF AMERICA AND UNION CARBIDE CORPORATION,
Appellants,

vs.

B. J. BOYD, COMMISSIONER, Appellee.

AMENDATORY JUDGMENT—March 4, 1963

This cause came on to be heard before this Court on a previous day upon a transcript of the record from the Chancery Court of Davidson County, assignments of error, reply brief and argument of counsel, and after full con-

sideration thereof this Court, on December 7, 1962, handed down its opinion therein.

And upon the same day, that is December 7, 1962, a judgment was entered of record in this case in Minute Book 45 at page 300.

And it now appearing to the Court that in said judgment, as entered, there is an error apparent on the face of the record and that in the interest of justice and in order that said judgment will appear and be rendered and entered in accordance with the opinion of the Court and will correctly set forth the decision and determination of the Court herein, it is ordered and decreed by the Court that said judgment be amended and modified so as to read as follows:

The Court finds and adjudges that the appellant, Union Carbide Corporation, in the purchasing of tangible personal property procured by it in accordance with its contract and [fol. 85] in fulfillment of its contract obligations, is a purchasing agent for the Atomic Energy Commission, and the imposition of the Sales Tax thereon would be the imposing of a direct tax upon the Government of the United States and hence invalid. Therefore, such purchases are exempt from the Tennessee Sales Tax because such are purchases by the Government.

It is accordingly adjudged and decreed that the decree of the Chancery Court, insofar as that decree holds the appellant, Union Carbide Corporation, liable for such Sales Tax be, and the same hereby is, reversed.

It is further ordered, adjudged and decreed by the Court that so much of the decree of the Chancery Court as holds that there is no arbitrary discrimination in connection with the imposition of the Tennessee Use Tax against those who deal with the United States Government, and so much of said decree as holds that in the general performance of its contract with the Atomic Energy Commission, Union Carbide Corporation is an independent contractor and is taxable under the Tennessee Use Tax Statute on its use of Government owned tangible personal property in the performance of its contract, should be and the same hereby is affirmed.

It is further ordered, adjudged and decreed that so much

of the decree of the Chancellor as dismisses appellants action be affirmed.

All costs of the cause will be paid by the appellant, Union Carbide Corporation, and R. R. Kramer and Jackson C. Kramer, Sureties on its Appeal Bond, and for such costs execution will issue.

This March 4, 1963.

_____, S. L. Felts, Weldon B. White, _____
W. Dyer.

[fol. 86] IN THE SUPREME COURT OF THE STATE OF
TENNESSEE

Davidson Equity

UNITED STATES OF AMERICA AND UNION CARBIDE CORPORATION,
Appellants,

v.

B. J. BOYD, COMMISSIONER, Appellee.

NOTICE OF APPEAL TO THE SUPREME COURT OF THE UNITED
STATES

I. Notice is hereby given that the United States of America and Union Carbide Corporation, the appellants above-named, hereby appeal to the Supreme Court of the United States from the final judgment entered in this action on December 7, 1962, as modified by decree entered on March 4, 1963, affirming the decree of the Chancellor dismissing the case.

This appeal is taken pursuant to 28 U.S.C., Section 1257(2).

II. The Clerk will please prepare a certified transcript of the record in this cause for transmission to the Clerk of the Supreme Court of the United States, and include in said transcript the following:

1. Transcript of the entire record as filed in the Supreme Court of Tennessee from the Chancery Court of Davidson County, but with the exception of the exhibits and stipulations 1, 1-A, 2, 3, 4 and 5, which ex-

hibits and stipulations as filed shall be certified and transmitted to the Clerk of the Supreme Court of the United States in their original form as allowed by the order of the Supreme Court of Tennessee.

2. The assignments of error, filed in the Supreme Court of Tennessee in support of the appeal to that court. [fols. 87-91]
3. Opinion of the Supreme Court of Tennessee.
4. Judgment of the Supreme Court of Tennessee entered on December 7, 1962.
5. Amendatory Judgment of the Supreme Court of Tennessee entered on March 4, 1963.
6. Order of Supreme Court with reference to Exhibits.
7. Notice of Appeal.
8. This designation.

III. The following questions are presented by this appeal:

1. Whether as construed and applied to property owned by the United States and used by Union Carbide Corporation in the performance of its management contract with the Atomic Energy Commission, the Tennessee Retailers' Sales Tax Act as amended (Section 67-3001 et seq., 12 Tenn. Code Annotated) is unconstitutional because it violates the immunity which the United States has from state taxation by imposing a tax upon the use by the United States of its property.
2. Whether the relationship of Union Carbide Corporation to the United States in the performance of the management contract was such as to preclude imposition of the use tax by Tennessee as violating the constitutional immunity which the United States has from state taxation.

Louis F. Oberdorfer, Assistant Attorney General,
 Department of Justice, Washington 25, D. C. R. R.
 Kramer, 904 Burwell Building, Knoxville, Ten-
 nessee, Attorney for Union Carbide Corporation,
 Oak Ridge, Tennessee.

Kenneth Harwell, United States Attorney, Nashville 3,
 Tennessee.

[fol.92] IN THE SUPREME COURT OF THE STATE OF
TENNESSEE

No. 37,558, Davidson Equity

[Title omitted]

ORDER GRANTING EXTENSION OF TIME FOR FILING RECORD AND
DOCKETING APPEAL—April 18, 1963

This Court extends the time within which the record on appeal in the above-styled case may be filed and the appeal docketed in the Supreme Court of the United States to and including the 3rd day of June, 1963, for good cause shown.

This April 18, 1963.

[signature illegible], Chief Justice Supreme Court of
Tennessee.

[Seal.]

[fol. 1] CHANCERY COURT PART I FOR DAVIDSON COUNTY,
TENNESSEE

No. 80061

THE UNITED STATES OF AMERICA, and THE H. K. FERGUSON
COMPANY, a corporation organized under the laws of the
State of Ohio and authorized to do business in the State
of Tennessee, Complainants,

VS.

B. J. BOYD, COMMISSIONER OF FINANCE AND TAXATION OF THE
STATE OF TENNESSEE, whose office and official residence
are located in Davidson County, Tennessee, Defendant.

ORIGINAL BILL—Filed May 28, 1958

Complainants respectfully show to the Court:

I

Complainant, the United States of America, by the United States Attorney for the Middle District of Tennessee, Fred Elledge, Jr., acting under direction of the Attorney General, respectfully shows to the Court that it has a direct and primary interest in the subject matter involved in this litigation and in the success in this suit of the complainant, [fol. 2] The H. K. Ferguson Company, (hereinafter referred to as Ferguson), in order to protect its sovereignty over its property and the operations being conducted by the Atomic Energy Commission, a governmental agency of the United States, pursuant to and under the authority of the Atomic Energy Acts of 1946 and 1954 as amended. (42 U. S. C. A. Secs. 2011-2281).

II

Complainants respectfully show to the Court that Ferguson is a corporation organized under the laws of the State of Ohio and during the period involved in this litigation had an office at Oak Ridge, Tennessee. Pursuant to a contract between the complainants, which contract is more fully hereinafter referred to, complainant Ferguson is presently

engaged and during the period involved in this litigation was engaged at Oak Ridge, Tennessee, in the execution of functions and activities of the Atomic Energy Commission for or pertaining to the alteration and construction of plants and facilities owned by the United States and which plants and facilities were used for the processing or production of source, special nuclear, by-product and other material, atomic weapons parts, and research and development in the field of atomic energy under the authority of the Atomic Energy Acts of 1946 and 1954 as amended.

The defendant, B. J. Boyd, is the Commissioner of Finance and Taxation of the State of Tennessee and is herein sued in his official capacity. The said Commissioner of Finance and Taxation is by various statutes of the State of Tennessee charged with the responsibility of collecting the taxes assessed and collected under the Tennessee Retailers' Sales Tax Act as amended.

III

This suit is brought to recover the sum of Twelve Thousand, One Hundred Seven and 52/100 Dollars (\$12,107.52) asserted by the State of Tennessee and defendant Commissioner to have been due and owing by the complainant, [fol. 3] The H. K. Ferguson Company, to the State of Tennessee for Sales and Use Taxes for the month of November, 1956, and which taxes were paid to the defendant Commissioner under protest by Ferguson on the 30th day of April, 1958. This payment was made after notice had been received by Ferguson from the defendant Commissioner that unless payment of such tax was made on or before the date payment was actually made, distress warrants would be issued against Ferguson and levied upon its property, and sufficient thereof for the payment of said tax would have been seized. This payment was wholly involuntary.

The sum total of taxes thus paid under protest and duress and for which recovery is sought herein consisted of Sales and Use Taxes allegedly due from Ferguson as a result of certain transactions and operations pursuant to the contract between Ferguson and the Atomic Energy Commission, which are hereinafter more particularly set forth.

IV

The defendant has advised the complainants that in addition to the payment heretofore exacted for the month of November, 1956, of Ferguson and which payment was made involuntarily under protest, as set forth in Section III of this Bill of Complaint, Sales and Use Taxes of the same type are claimed by the State of Tennessee as due from Ferguson for the entire period subsequent to August 12, 1955, up to and including March 20, 1957.

These complainants are advised that similar claims for like taxes are being asserted by defendant Commissioner against various other contractors who were likewise engaged in the performance of work on behalf of the Atomic Energy Commission at Oak Ridge, Tennessee, during this same period of time.

The total amount of taxes thus claimed by the State of Tennessee is approximately Two Million Dollars, of which more than One Hundred Forty-five Thousand Dollars is claimed from Ferguson.

V

Complainants would further show to the Court that on or about January 1, 1947, acting pursuant to and under [fol. 4] the Atomic Energy Act of 1946, and Executive Order No. 9816, dated December 31, 1946 (12 Federal Register, 37), of the President of the United States, the Oak Ridge area, together with all the Government-owned plants, buildings, facilities and equipment thereon, along with the control and operation of all atomic energy development, experimental and production work thereat were transferred from the Manhattan District of the War Department to the Atomic Energy Commission. These plants and facilities included the only (at that time) Atomic Energy Commission gaseous diffusion plant for the production of special nuclear material; the Oak Ridge National Laboratory; and other plants which were of vital importance to the national defense and other programs of the Atomic Energy Commission. These plants and facilities have been substantially expanded, and new plants and facilities added by the Atomic Energy Commission since 1947. Complainants would further show that all of said plants and facilities are an integral and indispensable

part of the processing and manufacturing facilities and activities of the Atomic Energy Commission which are located in numerous localities throughout the United States.

VI

Complainants would further show to the Court that on February 17, 1956, Ferguson entered into a contract with the Atomic Energy Commission, which contract was designated AT-(40-1)-2014 and which contract was effective as of August 12, 1955.

A copy of this contract with the supplements thereto which was in effect as of the due date of the taxes paid under protest and for which recovery is herein sought will be filed on the hearing of this case or sooner if required.

VII

Complainants would further show to the Court that pursuant to said Contract No. AT-(40-1)-2014 and during the period material to this litigation, Ferguson performed construction activities in and pertaining to the Atomic Energy Commission plants and facilities at Oak Ridge which were [fol. 5] used by the Atomic Energy Commission solely in the conduct of its research and production programs under directions, instructions, and over-all supervision of the Atomic Energy Commission. These research and production facilities included one of the Atomic Energy Commission's gaseous diffusion plants for the production of special nuclear material, the Oak Ridge National Laboratory, and other facilities of vital importance to the national defense programs carried on in Atomic Energy Commission facilities. The operations conducted with and in said plants and facilities, including the work and services performed by Ferguson, constituted activities of the Atomic Energy Commission under the Atomic Energy Acts of 1946 and 1954, as amended.

For its work and services pursuant to said contract Ferguson was paid a fixed management fee and received as allowable costs the expenses necessary or incident to the contract work, and not excluded under the contract provisions. Such allowable costs were paid from Government funds advanced to Ferguson solely for this purpose.

In general the work and services performed by Ferguson under the contract were carried on in close day by day cooperation with the Atomic Energy Commission and its staff. Ferguson was selected and has been retained for such work and services because of its technical and managerial ability. Ferguson undertook to perform various and unspecified construction-type activities for the account of the Atomic Energy Commission, and the latter established the objectives, made the decisions required to fit the work into the national program, and exercised over-all supervision and control of all the activities under the contract including the use of public funds, personnel administration, security, and safety.

The complainants would further show that the Atomic Energy Commission had a staff of employees at Oak Ridge which maintained day to day contact with the operations being carried on under said contract, as well as other related operations and activities conducted in other Atomic Energy Commission plants and facilities, and exercised such direct supervision and control over said operations and services as were deemed necessary or desirable. In the day to day operations under the contract, personnel of the construction division of the Atomic Energy Commission, and the Atomic Energy Commission's management contractor for operations, Union Carbide Corporation, worked side by side with the engineers and other personnel of the said Company. Said work consisted in part of new construction, but, in the main, consisted of alterations work on said Atomic Energy Commission plants and facilities, including changes to process systems, utility and building structures, installation of machinery and equipment, and modification of laboratory facilities. The work was located generally in operating areas being used by the Atomic Energy Commission's management contractor for operations, Union Carbide Corporation, and had to be accomplished under very precise scheduling and with a minimum of interference with operations. The details of such work were not known in advance, and from time to time the Atomic Energy Commission issued directives containing a general description of the work to be performed. The specific items of work and services performed were

those that the Atomic Energy Commission determined were not practical or feasible to have performed under the usual type of construction contract. In many cases, almost daily changes were made with respect to the design and engineering which in turn necessitated changes in the construction activity performed by Ferguson in or in connection with these Atomic Energy Commission plants and facilities. Only through the close relationship with the Atomic Energy Commission and Carbide in planning and executing the work was it possible for Ferguson to carry out the work contemplated by the contract. If the performance of said operations and services pursuant to the aforesaid contract Ferguson was a management contractor for the Atomic Energy Commission and, as such, was an agent and instrumentality of the United States.

[fol. 7] The Atomic Energy Commission's plants and facilities at Oak Ridge, Tennessee, in and on which Ferguson performed work under the contract cost the United States in excess of One Billion Dollars. The total expenses borne entirely by the Atomic Energy Commission out of annual appropriations by the United States, in connection with the work under said contract since 1955, were in excess of Twenty Million Dollars, including the value of electricity, and other direct Atomic Energy Commission procured and furnished materials and services used in the operations. All such plants, facilities, equipment, materials and property were used solely in the operations of the Atomic Energy Commission.

VIII

The complainants would show to the Court that under and pursuant to the terms of the aforesaid contract Ferguson was not required to use its own funds in the payment of allowable costs. The Government funds advanced to Ferguson were deposited in a designated national bank in accordance with the contract terms and requirements of the Atomic Energy Commission and the United States Treasury Department. Such account was designated as a "Government Account." This account and the funds therein were at all times so designated on the books and records maintained by Ferguson. For accounting purposes Ferguson was treated as though it were a branch office and

the Atomic Energy Commission the home office. All of Ferguson's financial and accounting operations under the contract were conducted in accordance with Atomic Energy Commission instructions, and the accounts maintained by Ferguson were an integral part of the Atomic Energy Commission's account system. Under the provisions of said contract the aforesaid taxes which were paid to the State of Tennessee through the Department of Finance and Taxation under protest and as a result of duress, as hereinbefore set forth, were paid by Ferguson out of funds of the complainant, United States, furnished to Ferguson, and the recovery of such funds will be for the account [fol. 8] of the United States and will be deposited as the Atomic Energy Commission may direct.

If the complainant, Ferguson, is compelled to pay the Sales and Use Taxes claimed by the State of Tennessee for the entire period from August 12, 1955, up to and including March 20, 1957, the complainant, United States, will be required to furnish the funds with which to pay such taxes.

IX

The tax assessment which has been made against Ferguson by the defendant Commissioner and referred to in Section III of this Bill, and on which the tax payment was made under protest and as a result of duress on the 30th day of April, 1958, was based upon allegedly taxable procurements and uses of tangible personal property by Ferguson at Oak Ridge, Tennessee, under its contract with the Atomic Energy Commission, notwithstanding the complainants' contention that the said procurements and uses were by and for the Atomic Energy Commission through Ferguson as an agent and instrumentality of the United States under the aforesaid contract. The total taxes demanded by the defendant Commissioner amounted to Twelve Thousand, One Hundred Seven and 52/100 Dollars, (\$12,107.52), all as shown in the tax bill rendered by the defendant to Ferguson on April 30, 1958, copy of which is attached hereto and marked Exhibit 1, but which need not be copied for process. Defendant Commissioner asserts authority to make said tax assessment and collection under

and by virtue of Section 67-3001 *et seq.* of Tennessee Code Annotated.

Because of the action of the defendant Commissioner in requiring the payment of these taxes in order to avoid seizure of the property of the complainant Ferguson under a distress warrant, payment under protest of these taxes was authorized by the Atomic Energy Commission and the institution of this suit by complainants for recovery of the sums so paid was authorized by the Atomic Energy Commission and the Attorney General of the United States.

[fol. 9]

X

As a necessary and integral part of the work and services performed under said contract, all of which work and services were and are an essential and integral part of the activities of the Atomic Energy Commission in the interest of national welfare, security and defense, Ferguson has procured on behalf of the Atomic Energy Commission or has been furnished by the Atomic Energy Commission, property of the kind described as being taxable under the said Retailers' Sales Tax and will continue to so procure or be furnished such property. All of such tangible personal property so procured by Ferguson or furnished by the Atomic Energy Commission, has been or will be used in the performance of activities of the Atomic Energy Commission pursuant to the contract hereinabove referred to, or has been or will be otherwise disposed of as directed by the Atomic Energy Commission. All such procurements by Ferguson have been and are made on procurement forms and terms and conditions approved by the Atomic Energy Commission and pursuant to procurement policies and practices authorized or directed by the Atomic Energy Commission.

During the period material to this litigation the contract of the Atomic Energy Commission with Ferguson provided that title to and ownership of all property furnished by the Government remained in the Government and title to and ownership of all property procured by and for the Atomic Energy Commission through Ferguson passed directly from the vendor to the Government.

The purchase orders issued by Ferguson stated:

"It is understood and agreed that this Purchase Order is entered into by the Company for and on behalf of the Government; that title to all supplies furnished hereunder by the Seller shall pass directly from the Seller to the Government, as purchaser, at the point of delivery; that the Company is authorized to and will make payment hereunder from Government funds advanced and agreed to be advanced to it by the Commission and not from its own assets, and administer this Purchase Order in other respects for the Commission, unless otherwise specifically provided for herein; that administration of this Purchase Order may be transferred from the Company to the Commission or its designee, and in case of such transfer and notice thereof to the Seller the Company shall have no further responsibilities hereunder; and that nothing herein shall preclude liability of the Government for [fol. 10] any payment properly due hereunder if for any reason such payment is not made by the Company from such Government funds."

In addition to procurements from regular commercial sources, Ferguson as agent of the Atomic Energy Commission procured items of tangible personal property from various vendors under contracts with the Government to sell items of equipment and supplies to Government agencies. It also obtained Government-owned property from Government warehouses or depots maintained by various Government agencies. Ferguson also obtained Government property from the Atomic Energy Commission and from other Atomic Energy Commission contractors in accordance with transfer and use policies and practices established by the Atomic Energy Commission to obtain maximum utilization of Government-owned property in all of the Atomic Energy Commission's operation. Title to and ownership of all such property so procured or obtained by Ferguson vested directly in the Government or remained in the Government and at no time did Ferguson acquire title to or ownership of such property.

The Atomic Energy Commission itself procured or obtained many types and classes of tangible personal property

which it furnished to Ferguson for use in the operations and services performed by Ferguson under the contract. These included items of equipment, supplies, and materials which the Atomic Energy Commission determined it would procure and furnish for the operation. Title to and ownership of all such property vested directly in the Government or remained in the Government and at no time did Ferguson acquire title to or ownership of such property.

XI

Complainants would further show to the Court that in all of the aforesaid procurements and uses of tangible personal property pursuant to and as a part of Ferguson's operations as a management contractor for the Atomic Energy Commission, Ferguson was acting as an agent and instrumentality of the United States. At no time did Ferguson have the beneficial use of such property for its [fol. 11] private ends.

XII

The complainants deny that Ferguson in the operations for the Atomic Energy Commission at Oak Ridge, Tennessee, was, during the period for which the defendant is asserting a claim for taxes under the Tennessee Retailers' Sales Tax Act, exercising a taxable privilege within the meaning of said statutory enactment and further deny that any Sales or Use Tax can legally be assessed against or collected from Ferguson under and by virtue of the provisions of said statute. It is denied that Ferguson has procured, used or stored for use or consumption any tangible personal property in connection with the functions performed under the aforesaid contract in such a manner as to create liability for any Sales or Use Tax under or by virtue of the provisions of the aforesaid statute.

In the performance of the aforesaid contract Ferguson was performing activities of the Atomic Energy Commission and was not engaged in any private business or commercial activity for profit.

XIII

Complainants further aver that by reason of the facts hereinbefore to the Court shown the Tennessee Retailers' Sales Tax Act, when properly construed neither necessitates nor authorizes the collection of the Sales Tax or the Use Tax which the defendant has assessed against, and collected from, Ferguson for the month of November, 1956, nor does it authorize the assessment against or collection from Ferguson of either of such taxes for any portion of the period between August 12, 1955, and March 20, 1957.

XIV

Complainants aver that if the Tennessee Retailers' Sales Tax Act is construed to require the payment of the Tennessee Sales Tax by dealers on sales made to Ferguson which are exempt from tax because of Federal immunity under the Constitution of the United States or any Act of Congress, said Tennessee Act is discriminatory and invalid [fol. 12] because it is repugnant to the Constitution of the United States, including Article I, Section 8, Clause 18, Article IV, Section 3, Clause 2, Article VI, Clause 2, and the 14th Amendment, Section 1 thereof, and Article II, Section 28 of the Constitution of the State of Tennessee.

XV

Complainants aver that if the Tennessee Retailers' Sales Tax Act is construed to be applicable to dealers on sales made to Ferguson which are exempt from tax because of Federal immunity under the Constitution of the United States or any Act of Congress, said Tennessee Act is discriminatory and invalid as applied because it is repugnant to the Constitution of the United States, including Article I, Section 8, Clause 18, Article IV, Section 3, Clause 2, Article VI, Clause 2, and the 14th Amendment, Section 1 thereof, and Article II, Section 28 of the Constitution of the State of Tennessee.

XVI

Complainants aver that if the Tennessee Retailers' Sales Tax Act is construed as requiring the imposition upon and collection of such taxes from Ferguson because of the trans-

actions and uses of property described in the preceding sections of this Bill, said Tennessee Act is invalid because it is repugnant to the Constitution of the United States, including Article I, Section 8, Clause 18, Article IV, Section 3, Clause 2 and Article VI, Clause 2.

XVII

Complainants aver that if the Tennessee Retailers' Sales Tax Act is construed to be applicable to Ferguson because of the transactions and uses of property described in the preceding sections of this Bill, said Tennessee Act is invalid as so applied because it is repugnant to the Constitution of the United States, including Article I, Section 8, Clause 18, Article IV, Section 3, Clause 2, and Article VI, Clause 2 thereof.

[fol. 13]

XVIII

Complainants aver that the assessment of the Sales and Use Taxes by the defendant Commissioner as referred to herein constitute an assessment of taxes upon the exclusive properties, activities or income of the United States, which properties, activities and income are immune from taxation by the State of Tennessee under the Constitution of the United States, including Article I, Section 8, Clause 18, Article IV, Section 3, Clause 2, and Article VI, Clause 2.

XIX

Complainants further aver that the assessment against Ferguson and the exaction from it, of the taxes set forth in this Bill impose taxes upon an agent and instrumentality of and for the United States and constitute an unconstitutional imposition of such tax upon the United States.

XX

For each and all of the reasons set forth in Sections XII through XIX of this Original Bill, the assessment and collection of the taxes paid under protest by Ferguson, as set forth above and for which recovery is herein sought, is illegal, contrary to law, and void, and these complainants

are entitled to have and recover the full amount of said taxes.

XXI

As shown in the foregoing recitals of this Bill the United States is directly and immediately affected by the taxes levied against and collected from Ferguson for or in connection with the performance of activities of the Atomic Energy Commission, which were authorized by and performed under the Atomic Energy Acts of 1946 and 1954 as amended. In addition, in this cause Government-owned property is being used as the measure of taxation against an agent or instrumentality of the United States. Moreover, the moneys sought to be recovered herein are moneys rightfully due and belonging to the United States which the defendant Commissioner illegally and unlawfully demanded and collected from Ferguson.

[fol. 14]

XXII

The Premises Considered, Complainants pray:

First: That proper process issue requiring the defendant to appear and answer this Bill, but his oath to his answer is waived.

Second: That upon the hearing decree be rendered in favor of complainants and against the defendant for the said sum of Twelve Thousand, One Hundred Seven and 52/100 Dollars (\$12,107.52), and that proper steps be taken pursuant to the statutory requirements of the State of Tennessee to the end that the Comptroller of the State of Tennessee shall issue his warrant for the amount of said decree and in order that the amount so decreed shall be paid in preference to other claims on the State Treasury.

Third: That declaratory judgment or decree be entered herein adjudging and decreeing that complainant, The H. K. Ferguson Company, does not owe the State of Tennessee or the Commissioner of Finance and Taxation of the State of Tennessee, any amount for Sales and/or Use Taxes for the month of November, 1956, for or based upon the procurement, use, storage, consumption or storage for use or consumption of any tangible personal property pursuant to or in connection with the performance of any of the

activities of the Atomic Energy Commission described herein.

Fourth: That declaratory judgment or decree be entered herein adjudging and decreeing that The H. K. Ferguson Company does not owe the State of Tennessee nor the Commissioner of Finance and Taxation of the State of Tennessee any amount for Sales and Use Taxes for the period from August 12, 1955 to March 20, 1957, or any portion thereof, for or based upon the procurement, use, storage, consumption or storage for use or consumption of any tangible personal property pursuant to or in connection with the performance of any of the activities of the Atomic Energy Commission described herein.

Fifth: That they be given all such other, further and general relief as they or either of them may be entitled to on the hearing.

[fol. 15] Fred Elledge, Jr., United States Attorney for the Middle District of Tennessee, Solicitor for Complainant, United States of America. Jackson C. Kramer, R. R. Kramer, Solicitors for Complainant, The H. K. Ferguson Company.

Of Counsel:

L. K. Olson, General Counsel, J. Y. Ould, Jr., Assistant General Counsel, O. S. Hiestand, Jr., David L. Oakley, Jr., Herzel H. E. Plaine, Attorneys, for United States Atomic Energy Commission.

Kramer, Dye, McNabb & Greenwood, For the H. K. Ferguson Company.

We hereby acknowledge ourselves surety for the costs incident to this suit in an amount not to exceed Two Hundred Fifty Dollars (\$250.00).

Jackson C. Kramer, R. R. Kramer.

[fol. 16-17] EXHIBIT 1 TO ORIGINAL BILL

State of Tennessee

DEPARTMENT OF FINANCE AND TAXATION
Nashville

(3)

Tax Bill

#012-50-0333

H. K. Ferguson Company,
P. O. Box 982,
Oak Ridge, Tennessee.

Year	Tax	Penalty	Interest	Total	Kind of Tax	Amount Due
November, 1956	\$12,107.52				Sales and Use	\$12,107.52

Filed May 28, 1958.

[Signature illegible]

Important—To assure prompt and correct credit, mail duplicate bill with remittance to Department of Finance and Taxation, 107 War Memorial Building, Nashville 3, Tennessee. If a receipt is required, enclose original bill also. It will be endorsed "Paid" and returned to you.

B. J. Boyd, Commissioner of Taxation.

[fol. 18] CHANCERY COURT PART I FOR DAVIDSON COUNTY,
TENNESSEE

[Title omitted]

ANSWER TO ORIGINAL BILL—Filed Sept. 3, 1958

Comes defendant B. J. Boyd, Commissioner of Finance and Taxation of the State of Tennessee and for answer to the original bill filed against him in this case does say:

I

It is denied that the complainant, United States of America, has any direct or primary interest in the subject matter involved in this suit, or that there is at stake in this suit any sovereignty of the United States of America, or any of its sovereign rights, powers or immunities. To the contrary, defendant avers that the Tennessee taxes called into question herein are imposed upon The H. K. Ferguson Company alone on account of its activities within the State of Tennessee, and that the effect of these taxes upon the United States of America is but secondary and indirect, and exists solely on account of the voluntary assumption by the United States of America of the economic [fol. 19] burden resulting from such taxes. Defendant assumes that the Court will permit the United States of America to be heard herein to the extent of any interest which it has or can show, but would emphasize to the Court that the State of Tennessee has not sought and does not now seek to impose any tax upon the United States or any of its governmental agencies or instrumentalities. Defendant admits that the Atomic Energy Commission is a governmental agency of the United States, pursuant to and under the authority of the Atomic Energy Acts of 1946 and 1954. He denies, however, most emphatically, that such status is enjoyed by The H. K. Ferguson Company or any other private corporation contracting with the United States Government or any of its agencies or instrumentalities.

II

The allegations and averments contained in Paragraph II of the original bill are admitted. Defendant further avers however, that The H. K. Ferguson Company is duly

domesticated in Tennessee and doing business within Tennessee under its Tennessee domestication, and that it is a private, profit-type corporation engaged in business in this State for the purpose of profit, and that its activities in Tennessee do result in a profit of a very substantial character to it and its shareholders.

III

All the allegations and averments contained in Paragraph III of the original bill are admitted.

IV

All the allegations and averments contained in Paragraph IV of the original bill are admitted.

V

All the allegations and averments contained in Paragraph V of the original bill are admitted.

VI

It is admitted that on February 17, 1956 The H. K. Ferguson Company entered into a contract with the Atomic Energy Commission, which contract was designated AT-(40-1)-2014 and which contract was effective as of August 12, 1955.

[fol. 20]

VII

Having no information with regard to the type of construction activities engaged in by Ferguson during the period in question, the purpose of such construction or the subsequent use to which the facilities constructed was put, defendant denies all of the allegations contained in the original bill with respect to these matters.

Defendant emphatically denies, however, that the work and services performed by Ferguson were carried on in close day by day cooperation with the Atomic Energy Commission or its staff. To the contrary, defendant avers that there is no close cooperation with respect to the actual routine day to day work carried on by The H. K. Ferguson Company, for the reason that the Atomic Energy Com-

mission does not possess, nor do its bona fide government employees possess, the technical skill and knowledge requisite to the capable performance of large scale construction contracts, whereas such skill and knowledge is possessed by Ferguson and its employees, and that it was for this reason alone that the Atomic Energy Commission entered into the contract in question with Ferguson. Defendant further avers that all of the activities carried on by Ferguson were performed by persons who were private employees of Ferguson, Solely controlled by Ferguson, solely answerable to Ferguson and its management, and solely paid by Ferguson, and that these persons were in no sense of the word employees of the Atomic Energy Commission or of any other agency or department of the United States Government. It is denied vigorously that The H. K. Ferguson Company is, or ever has been, an agent or instrumentality of the United States in any capacity.

Defendant admits the allegations with respect to the cost of the operations at Oak Ridge, Tennessee, but would insist to the Court that they are completely immaterial to this lawsuit in that the State of Tennessee has never con-[fol. 21] tended and does not now contend that it is entitled to any sales or use taxes except with respect to items of tangible personal property sold, used, rented or leased, distributed or stored for use or consumption by private persons or contractors in connection with the activities in and around Oak Ridge. Defendant would further point out that a large part of the over-all cost of the project in question has consisted of payments for labor, services, and items of tangible property not within the scope of the sales tax law or items specifically exempted from such law by its own terms.

VIII

Having no information with respect to any of the allegations contained in Paragraph VIII of the original bill, defendant denies them each and all.

IX

All the allegations and averments contained in Paragraph IX of the original bill are admitted.

X

Defendant neither admits nor denies the allegations contained in Paragraph X of the original bill respecting materials procured by or furnished to The H. K. Ferguson Company and used by it in the performance of its contract with the Atomic Energy Commission, and likewise neither admits nor denies the allegations respecting the form and manner of procurement of such materials, including the type of purchase order used in such procurement and the vesting or reservation of the title to such materials in the Atomic Energy Commission, but defendant would require strict proof of such allegations insofar as they are deemed to be material to the determination of this controversy. Defendant would, however, show the Court that irrespective of the form and manner of procurement by The H. K. Ferguson Company of such materials, or of the vesting or reservation of the title to such materials in the Atomic Energy Commission, the Tennessee sales and use taxes are [fol. 22] clearly applicable to the use by The H. K. Ferguson Company, of all such materials from and after May 1, 1955 by virtue of the following provisions of the Tennessee sales and use tax law as codified in Tennessee Code Annotated:

67-3003, which declares it to be a taxable privilege to sell tangible personal property at retail or to use same in Tennessee, irrespective of the ownership of such property or any tax immunity which may be enjoyed by the owner thereof;

67-3004, which places liability specifically upon contractors using tangible personal property in the performance of contracts or fulfilment of contractual obligations, whether the title to such be in the contractor, contractee or any other person, or whether the title holder would be subject to taxation;

67-3016, which makes the tax collectible as of the time of sale or purchase from all who are engaged as dealers in the sale, use, consumption or storage of tangible personal property in Tennessee;

67-3017, which defines the term 'dealer' to mean any person who uses tangible personal property in the performance of a contract for the fulfilment of contrac-

tual obligations, whether title to such property is in him or some other entity, and whether or not such other entity is liable for taxation; and

67-3018, which provides that in the event that sales or use tax cannot be passed on to the purchaser or consumer by reason of the Federal Constitution or any Act of Congress, it shall nevertheless be paid by the dealer.

XI

Defendant denies that the procurements and uses of tangible personal property by The H. K. Ferguson [fol. 23] Company as a contractor for the Atomic Energy Commission were done by Ferguson as an agent or instrumentality of the United States. It is further denied that Ferguson never had the beneficial use of such property for its private ends. To the contrary, it is averred that The H. K. Ferguson Company is presently engaged in business in this State for the purpose of making a profit, and that it has never in the past been engaged in business here for any other purpose, and that it has in fact realized from its activities in Tennessee a very handsome profit, which has inured to its benefit and that of its stockholders. Its use of the property in question comprised a very substantial portion of its activities in pursuit of profit, and to that extent it had every whit as much beneficial use of the property employed and applied in the consummation of its contract as does any private contractor operating upon a cost-plus-a-fixed-fee basis.

XII

Defendant refutes complainants' denial that The H. K. Ferguson Company was during the period in question exercising a taxable privilege under the Tennessee sales tax statute. To the contrary defendant asserts that Ferguson's activities during the period in question fall squarely within the provisions of this statute, and particularly those provisions hereinbefore alluded to. Defendant likewise denies that Ferguson has never procured, used or stored for use or consumption any tangible personal property in connection with its contractual functions so as to create liability under the sales tax statute. Defendant further

denies that in the performance of its contract The H. K. Ferguson Company was not engaged in private business or commercial activity for a profit. To the contrary defendant avers that all of Ferguson's activities in Tennessee were for the sole purpose of producing a profit, and that profit-wise its ventures in this State have been highly successful.

[fol. 24]

XIII.

Defendant denies that the sales tax statute when properly construed neither necessitates nor authorizes the collection of the sales and use taxes assessed against and collected from The H. K. Ferguson Company for the month of November 1956, and further denies that it does not authorize assessments or collections for any of the period between August 12, 1955 and March 20, 1957.

XIV.

Defendant denies that if the sales tax statute is construed to require the payment of sales tax by dealers with respect to sales of tangible personal property not specifically exempted to Ferguson, such statute is discriminatory, invalid or repugnant to any provision of the state or federal constitutions.

XV

Defendant denies that if the Tennessee sales tax statute is construed to be applicable to dealers with respect to sales made to Ferguson, such statute is discriminatory or invalid because repugnant to any provision of the state or federal constitutions.

XVI

Defendant denies that if the sales tax statute is construed as requiring the imposition upon and collection of sales or use taxes from Ferguson because of the transactions and uses of property described in the original bill, said statute is invalid because repugnant to any provision of the federal constitution. To the contrary defendant avers that it is well established in constitutional law that a state may permissibly tax the operations of a private contractor with the Federal Government in the absence of

federal legislation specifically conferring exemption from state taxation upon such contractor or such operation.

XVII

Defendant denies likewise that the said statute, if [fol. 25] construed to be applicable to Ferguson on account of described transactions and uses of property, is invalid as so applied because repugnant to any provision of the federal constitution.

XVIII

Defendant denies that the assessment by him of sales and use taxes constitutes an assessment of taxes upon the exclusive properties, activities or income of the United States so as to contravene any provision of the Constitution of the United States.

XIX

Defendant denies that the assessment against Ferguson or the exaction from Ferguson of the described taxes serves to impose taxes upon an agent or instrumentality of and for the United States; or that it represents an unconstitutional imposition of such tax upon the United States. To the contrary defendant reiterates that all he has done or sought to do herein is to impose valid taxes in a lawful manner upon a private corporation doing business in this state, and that such action in no wise infringes the sovereign immunity from taxation enjoyed by the United States.

XX

Defendant denies that for the reasons set forth by complainants or for any other reason the assessment against and collection from Ferguson of the taxes in question are illegal, contrary to law or void, or that complainants, or either of them, are entitled to recover said taxes or any portion thereof.

XXI

Defendant denies emphatically that the United States is directly or immediately affected by the taxes levied against and collected from Ferguson for or in connection with the performance of activities for the Atomic Energy

Commission. To the contrary defendant avers that the effect of these taxes upon the United States is indirect [fol. 26] and remote, and that if the full impact of such taxes falls upon the United States, it is for the sole reason that the latter has of its own will and volition agreed and undertaken to assume such burden and thus relieve its contractor therefrom. While it is admitted that in this cause government-owned property is in some instances being used as a measure of taxation, defendant avers that such measure is with reference to the taxation of a privilege enjoyed by a private corporation under the laws of the state and does not in any wise affect the Government or its revenues except to the extent that the Government chooses to be so affected in the framing of its contract with the H. K. Ferguson Company. It is denied that this private corporation is in any wise an agent or instrumentality of the United States so that the effect of taxation of government-owned property furnished to it amounts to the taxation of the United States. It is denied that the moneys are rightfully due and belonging to the United States, or that defendant has illegally or unlawfully demanded or collected them from Ferguson.

Defendant would further show the Court that prior litigation between Atomic Energy Commission contractors and the State terminated in a decision favorable to the former in the Supreme Court of Tennessee and the Supreme Court of the United States, solely on account of the provision then appearing in Section 9 (b) of the Atomic Energy Act, which provision exempted the Atomic Energy Commission and its properties, activities and income from said taxation, the word "activities" being held to be so broad as to include those things which the Commission undertook or accomplished through private contractors. Subsequent to this litigation, Congress amended the Atomic Energy Act by deleting from Section 9(b) this provision, thereby indicating in clear terms its intent that the private contractors of the Commission pay sales and use taxes to the [fols. 27-30] states wherein they operated. The complainant The H. K. Ferguson Company then proceeded to pay such taxes to the State of Tennessee until the time when the Commission altered the purchase order forms to be

employed by it, and upon the basis of such altered language commenced to claim immunity of its purchases made thereunder from taxation by Tennessee. Defendant would further show the Court that sales and use taxes have been and are currently being paid to other states having sales and use tax statutes similar to or identical with Tennessee's by private contractors with the Commission such as Ferguson, and avers that if such payments are made to other states there is no legal or moral justification for their not being paid to Tennessee. Defendant would likewise show the Court that the State of Tennessee does not collect from Ferguson or any other contractor with the Atomic Energy Commission any ad valorem property taxes whatsoever, which is not true in most of the other states in which the Commission's activities are conducted; Tennessee, as the Court knows, being dependent largely upon its sales and use taxes for general purpose revenue.

All allegations and averments of the original bill not hereinbefore specifically admitted or specifically denied are here and now denied as fully and completely as though dealt with separately.

And now having fully answered defendant prays to be dismissed with his just costs.

George F. McCanless, Attorney General. Allison B. Humphreys, Solicitor General. Milton P. Rice, Assistant Attorney General, Solicitors for Defendant.

[fol. 31] IN THE CHANCERY COURT, DAVIDSON COUNTY,
TENNESSEE

[Title omitted]

ORDER ALLOWING DEFENDANT TO AMEND ANSWER—April 4,
1960

Defendant having moved that he be permitted to amend his answer heretofore filed in this cause, the complainants consenting, it is hereby ordered, adjudged and decreed that defendant's answer be and the same is hereby amended by

deleting therefrom the following language appearing on Page 11 thereof:

"The complainant The H. K. Ferguson Company then proceeded to pay such taxes to the State of Tennessee until the time when the Commission altered the purchase order forms to be employed by it, and upon the basis of such altered language commenced to claim immunity of its purchases made thereunder from taxation by Tennessee."

Approved for entry:

Fred Elledge, Jr., United States District Attorney, Middle District of Tennessee. Russell R. Kramer, Burwell Building, Knoxville, Tennessee, Solicitors for Complainants.

[fols. 32-43] George F. McCanless, Attorney General. Milton P. Rice, Assistant Attorney General. David M. Pack, Assistant Attorney General, Solicitors for Defendant.

[fol. 44] IN THE SUPREME COURT OF THE STATE OF
TENNESSEE

ASSIGNMENT OF ERRORS

First: The learned Chancellor erred in finding and holding that The H. K. Ferguson Company was an independent contractor under its contract with the Atomic Energy Commission.

(Tr. pp. 35-38).

The appellant, The H. K. Ferguson Company, was prejudiced by the holding referred to in this assignment and by the failure of the Court to hold that the Company was the agent of the Federal Government engaged in the exercise of a privilege on behalf of the Federal Government in the performance of activities of the Atomic Energy Commission and hence constitutionally immune from State taxation. This erroneous holding resulted in denying to this appellant immunity from the taxes involved in this litigation, to which immunity it was entitled.

Second: The learned Chancellor erred in finding and holding that the taxes here involved, which were levied under T.C.A., Section 67-3003, are nondiscriminatory in their application to procurements and uses of tangible personal property pursuant to and under the contracts here involved.

(Tr. pp. 35-38).

The appellant, The H. K. Ferguson Company, was prejudiced by the holding referred to in this assignment and by the failure of the Court to hold that the taxes claimed operate so as to discriminate against the Federal Government and those with whom it deals. This is especially true inasmuch as the Statute involved singles out vendors who sell to the United States and imposes upon them an obligation to pay the Tennessee Retailers' Sales Tax but such obligation is not imposed upon vendors who sell to the State of Tennessee or its political subdivisions nor is it imposed upon vendors who sell to certain other organizations which the Statute exempts from payment of the tax.

[fol. 45]. Third: The learned Chancellor erred in finding and holding that the appellant, The H. K. Ferguson Company, is liable for the payment of the taxes here involved. This holding creates an arbitrary, capricious and unreasonable classification of taxpayers under the Tennessee Retailers' Sales Tax Act and hence places the Statute in violation of the equal protection clauses of the Federal Constitution and of the Constitution of the State of Tennessee.

As a result of the holding herein referred to the Statute singles out vendors who sell to the United States and imposes upon them an obligation to pay the Tennessee Retailers' Sales Tax but such obligation is not imposed upon vendors who sell to the State of Tennessee or its political subdivisions nor is it imposed upon vendors who sell to certain other organizations which the Statute exempts from payment of the tax.

Fourth: The Tennessee Retailers' Sales Tax Act does not tax use per se of tangible personal property and a non-owner of tangible personal property must have a separable and beneficial use thereof, different from the kind of use here involved, in order for such use to be subject to tax under this Statute. Hence the learned Chancellor erred in

holding that the appellant, The H. K. Ferguson Company, is subject to the tax here involved.

This record discloses that the only use of the tangible personal property which is the basis upon which the tax herein claimed is asserted to be an obligation of this appellant was a use made in connection with the performance of its Atomic Energy Commission contract.

Inasmuch as all the activities of this appellant, in which activities the uses of such personal property were had, were carried out in the performance of a public duty mandatorily required by an Act of Congress, such use did not constitute a taxable use under the Tennessee Retailers' Sales Tax Act.

[fols. 46-81] Fifth: The learned Chancellor erred in finding and holding that there is no express statutory exemption in the Tennessee Retailers' Sales Tax Act covering the purchases and uses of the tangible personal property here involved, and therefore the appellants cannot successfully assert exemption from the tax in question..

(Tr. p. 36).

This holding of the Court was erroneous because the record clearly establishes that the sales involved insofar as The H. K. Ferguson Company is concerned were made to the United States as the real purchaser and therefore such sales were within the express exemption contained in T.C.A., Section 67-3004.

[fol.82-83] IN THE SUPREME COURT OF TENNESSEE

Number 37559 Davidson Equity, Affirmed

UNITED STATES OF AMERICA AND THE H. K. FERGUSON
COMPANY,

v.

B. J. BOYD, COMMISSIONER.

JUDGMENT—December 7, 1962

This cause coming on to be heard upon a transcript of the record from the Chancery Court of Davidson County, assignments of error, reply brief and argument of counsel, upon consideration whereof the Court is of opinion that in the decree of the Chancellor there is no error.

It is therefore ordered and decreed by the Court that the decree of the Chancellor be in all things affirmed and that the cause be dismissed.

All the cost of the cause will be paid by the H. K. Ferguson Company, Principal; and R. B. Kramer and Jackson C. Kramer, Sureties; for which let execution issue.

12/7/62

[fol. 84] IN THE SUPREME COURT OF THE STATE OF
TENNESSEE

No. 37,559, Davidson Equity

UNITED STATES OF AMERICA AND THE H. K. FERGUSON
COMPANY, Appellants

vs.

B. J. BOYD, COMMISSIONER, Appellee

AMENDATORY JUDGMENT—March 4, 1963.

This cause came on to be heard before this Court on a previous day upon a transcript of the record from the Chancery Court of Davidson County, assignments of error,

reply brief and argument of counsel, and after full consideration thereof this Court, on December 7, 1962, handed down its opinion therein.

And upon the same day, that is December 7, 1962, a judgment was entered of record in this case in Minute Book 45 at page 300.

And it now appearing to the Court that in said judgment, as entered, there is an error apparent on the face of the record and that in the interest of justice and in order that said judgment will appear and be rendered and entered in accordance with the opinion of the Court and will correctly set forth the decision and determination of the Court herein, it is ordered and decreed by the Court that said judgment be amended and modified so as to read as follows:

The Court finds and adjudges that the appellant, The H. K. Ferguson Company, in the purchasing of tangible personal property procured by it in accordance with its contract and in fulfillment of its contract obligations, is a purchasing agent for the Atomic Energy Commission, [fol. 85] and the imposition of the Sales Tax thereon would be the imposing of a direct tax upon the Government of the United States and hence invalid. Therefore, such purchases are exempt from the Tennessee Sales Tax because such are purchases by the Government.

It is accordingly adjudged and decreed that the decree of the Chancery Court, insofar as that decree holds the appellant, The H. K. Ferguson Company, liable for such Sales Tax be, and the same hereby is, reversed.

It is further ordered; adjudged and decreed by the Court that so much of the decree of the Chancery Court as holds that there is no arbitrary discrimination in connection with the imposition of the Tennessee Use Tax against those who deal with the United States Government, and so much of said decree as holds that in the general performance of its contract with the Atomic Energy Commission, The H. K. Ferguson Company is an independent contractor and is taxable under the Tennessee Use Tax Statute on its use of Government owned tangible personal property in the performance of its contract, should be and the same hereby is affirmed.

It is further ordered, adjudged and decreed that so much of the decree of the Chancellor as dismisses appellants' action be affirmed.

All costs of the cause will be paid by the appellant, The H. K. Ferguson Company, and R. R. Kramer and Jackson C. Kramer, Sureties on its Appeal Bond, and for such costs execution will issue.

This March 4, 1963

[Signature illegible], S. L. Felts, Wheldon B. White,
Russ W. Dyer.

[fol. 86] IN THE SUPREME COURT OF THE STATE OF
TENNESSEE

[Title omitted]

NOTICE OF APPEAL TO THE SUPREME COURT OF THE UNITED
STATES

I. Notice is hereby given that the United States of America and The H. K. Ferguson Company, the appellants above-named, hereby appeal to the Supreme Court of the United States from the final judgment entered in this action on December 7, 1962, as modified by decree entered on March 4, 1963, affirming the decree of the Chancellor dismissing the case.

This appeal is taken pursuant to 28 U.S.C., Section 1257(2).

II. The Clerk will please prepare a certified transcript of the record in this cause for transmission to the Clerk of the Supreme Court of the United States, and include in said transcript the following:

1. Transcript of the entire record as filed in the Supreme Court of Tennessee from the Chancery Court of Davidson County, but with the exception of the exhibits and stipulations 1, 2, 3, and 4.
2. The transcript will also include the following enumerated depositions and stipulations together with all

exhibits from the record on file in this court in the case of the United States of America and Union Carbide Corporation versus B. J. Boyd, Commissioner etc., Number 37,558 on the Rule Docket of the Supreme Court of Tennessee, inasmuch as these depositions, [fol. 87] stipulations and exhibits were by stipulation made a part of the record in this case:

- (a) Depositions of S. R. Sapirie, Charles Vanden Bulck and Clark E. Center.
 - (b) Duplicate originals of stipulations 1, 1-A and 2.
 - (c) Duplicate originals of all exhibits.
3. The exhibits and stipulations referred to in paragraphs 1 and 2 above will be certified and transmitted to the Clerk of the Supreme Court of the United States in their original form as allowed by the order of the Supreme Court of Tennessee.
 4. The assignments of error filed in the Supreme Court of Tennessee in support of the appeal to that court.
 5. Opinion of the Supreme Court of Tennessee.
 6. Judgment of the Supreme Court of Tennessee entered on December 7, 1962.
 7. Amendatory Judgment of the Supreme Court of Tennessee entered on March 4, 1963.
 8. Order of Supreme Court with reference to Exhibits.
 9. Notice of Appeal.
 10. This designation.

III. The following questions are presented by this appeal:

1. Whether as construed and applied to property owned by the United States and used by The H. K. Ferguson Company in the performance of its contract with the Atomic Energy Commission, the Tennessee Retailers' Sales Tax Act as amended (Section 67-3001 et seq., 12 Tenn. Code Annotated) is unconstitutional because it violates the immunity which the United States has from state taxation by imposing a tax upon the use by the United States of its property.
- [fol. 88] 2. Whether the relationship of The H. K. Ferguson Company to the United States in the performance

of its contract was such as to preclude imposition of the use tax by Tennessee as violating the constitutional immunity which the United States has from state taxation.

Louis F. Oberdorfer, Assistant Attorney General,
Department of Justice, Washington 25, D. C.
R. R. Kramer, 904 Burwell Building, Knoxville,
Tennessee, Attorney for The H. K. Ferguson Com-
pany, Oak Ridge, Tennessee.

Kenneth Harwell, United States Attorney, Nashville 3,
Tennessee.

[fols. 89-93] Certificate of Service (omitted in Printing).

[fol. 94] IN THE SUPREME COURT OF THE STATE OF
TENNESSEE

[Title omitted]

ORDER GRANTING EXTENSION OF TIME FOR FILING RECORD
AND DOCKETING APPEAL—April 18, 1963

This Court extends the time within which the record on appeal in the above-styled case may be filed and the appeal docketed in the Supreme Court of the United States to and including the 3rd day of June, 1963, for good cause shown.

This April 18, 1963.

_____, Chief Justice Supreme Court of Tennes-
see.

[fol. 93] IN THE CHANCERY COURT PART—FOR DAVIDSON
COUNTY, TENNESSEE

No. 80,060

THE UNITED STATES OF AMERICA AND UNION CARBIDE
CORPORATION, Complainants,

vs.

B. J. BOYD, COMMISSIONER OF FINANCE & TAXATION
OF THE STATE OF TENNESSEE, Defendant

Excerpts from Testimony

[fol. 94] APPEARANCES:

For Complainants: R. R. Kramer, Jackson C. Kramer,
On behalf of Union Carbide Corporation: Edward A.
Bogdan, Department of Justice, Washington, D. C. On be-
half of United States of America. O. S. Heistand, Jr.,
David L. Oakley, On behalf of Atomic Energy Commission.

For Defendant: Milton P. Rice, Assistant Attorney Gen-
eral, State of Tenn.

[fol. 95] S. R. SAPIRIE, being first duly sworn, was ex-
amined and deposed as follows:

Direct examination.

By Mr. R. R. Kramer:

Q. Mr. Sapirie, how do you sign your name?

A. S. R. Sapirie, Manager, Oak Ridge Operations, AEC.

Q. And you reside at Oak Ridge, Tennessee, now?

A. I do.

Q. How long have you been connected with the Oak
Ridge project either with AEC or with its predecessor, the
Manhattan Engineering District?

A. Continuously since July of 1946.

Q. What was your background before you came to the Oak Ridge project?

A. I am a graduate civil engineer, and my experience has been principally on management of engineering construction jobs until the time I came to Oak Ridge.

Q. And you came to Oak Ridge first in what capacity and at what date?

A. My first assignment at Oak Ridge was as Assistant Director of Operations, and that was in July of 1946. That was with the Manhattan Engineering District of the Corps of Engineers.

Q. What was the scope of the work that you had under [fol. 96] you as Assistant Manager of Operations? Just generally and not too much detail.

A. As Assistant Director of Operations, I assisted the Director of Operations in handling the overall construction and production activities of the Manhattan District, not only at Oak Ridge but at all of the other installations then working for the Manhattan District.

Q. And that did include some operations outside of what is located at Oak Ridge, Tennessee?

A. That is correct.

Q. When did the Manhattan District go out of the picture so far as the handling of the Oak Ridge project is concerned?

A. The Manhattan District turned the responsibility over to Atomic Energy Commission on January 1, 1947.

Q. That was pursuant to the 1946 Act of Congress?

A. That is correct.

Q. Beginning with January, 1947, when the Atomic Energy Commission took over, let's state your connection in general terms and explain it down to the present date.

A. The first assignment I had under the Atomic Energy Commission was as Director of the Division of Production and Engineering for the newly established Oak Ridge Operations. In this capacity I was responsible for the design, construction, and operation of the production plants [fol. 97] within the Oak Ridge area.

Q. Did you later change positions or was your classification changed, and, if so, let's go through with it down to the present time with general description of the duties that you have had.

A. I held that position for approximately two years, after which I was promoted to the position of Deputy Manager, Oak Ridge Operations.

I was in that position for approximately two years, until February of 1951, at which time I was promoted to the position of Manager, Oak Ridge Operations.

During this period of time our operations did grow, and we assumed responsibility for several areas outside of the Oak Ridge area.

Q. During the period 1955 to 1957 then you were manager of Oak Ridge Operations?

A. That is correct.

Q. And during that period, what all was under your direction or jurisdiction?

A. During that period I was responsible to the Atomic Energy Commission in Washington for the administration of the program assigned to Oak Ridge Operations.

This program included the design and construction of new facilities being added to our complex, and the management of the operation of those facilities already available [fol. 98] to us. These facilities were to a large extent used in the production of fissionable material, but in addition we had responsibility for the operation of the Oak Ridge National Laboratory which was one of the Commission's major research and development centers. And we also had responsibility at that time for the management and operation of the city of Oak Ridge.

Q. Just to get the entire picture in the record, as Manager of Oak Ridge Operations of the Atomic Energy Commission, did you have any other locations, or the operations at other locations, than Oak Ridge, under your direction during this period?

A. Yes, the Oak Ridge Operations include not only the operations of the facilities located within the Oak Ridge area, but also include the operation of similar facilities at Paducah, Kentucky, at Portsmouth, Ohio, at Fernald, Ohio, which is close to Cincinnati, and at Weldon Spring, in St. Louis, Missouri. Weldon Spring is close to St. Louis.

We also had responsibility for operation of a laboratory at New Brunswick, New Jersey. And I believe at that time we still had responsibility for the Mound Laboratory near Miamisburg, Ohio. Shortly after that date, however, the

Mound Laboratory was transferred to Albuquerque, New Mexico, operations.

Q. Your national policy, under which the work of the [fol. 99] Atomic Energy Commission and the Oak Ridge Operations is carried on, is the work as generally specified in the Atomic Energy Act of 1946; is it not?

A. That is correct.

Q. My attention is just called to the fact that I am referring to the Congressional Act of 1946. There has been a later enactment known as the Act of 1954, which, I believe, was applicable during the period we are now interested in, '55 to '57?

A. That is correct.

Q. So that during that period you were acting pursuant to this Act of 1954?

A. It is the basic Atomic Energy Act as modified by the Act of 1954.

Q. Beginning with the take-over by the Atomic Energy Commission in 1947, and continuing down to the present time, has the general policy with reference to Oak Ridge, its method of dealing with contractors, and so on, in general, been carried on in the same manner?

A. In general, yes.

Q. What is the reason for carrying on a lot of its operations or most of its operations by the managing contractor? What is the reason back of that?

A. Well, the principal reason we started operating on this basis was that the Manhattan District and the Corps of [fol. 100] Engineers established the initial operation of our production plants on this basis. When the Atomic Energy Commission took over in January of 1947, the most efficient procedure was to retain the same operating organizations because of the importance of the work that was being done and the risk that might be entailed in making any change.

However, the basic reason that we have continued to employ management contractors is that this provides a means for the Atomic Energy Commission to gain access to operating talents that are of extreme value to the requirements of our program. It provides flexibility for us to expand and contract our operations as necessary to satisfy the changes of the programs.

Q. I believe that it is averred in the complaint that Union Carbide is operating under what we call a manager contractor concept. Will you explain what we mean by that?

A. Well, the Union Carbide operation is a cost type management contract under which the Commission advances the funds which the contractor establishes in a separate account identified as a Government fund account, and from which he pays the various bills that accrue under the operation. And the Government from time to time replenishes this account to make up for the costs incurred.

The contractor performs those functions that are assigned to him from time to time by the AEC and in accordance with the specifications and in many cases the exact procedures established by the AEC.

He operates facilities that are constructed and owned by the AEC. All of the property that he uses and the material which he works on are owned by the AEC, and in many cases his operation is but a small part of an overall operation which is accomplished by other management type contractors and in some cases by AEC and other Government employees.

I might add that to all intents and purposes the management type contract operation resembles that of one of our AEC area offices in that we assigned specific responsibilities and change these responsibilities from time to time and audit the activities to make sure that the work is being accomplished in accordance with the Commission's requirements.

Q. Was Union Carbide operating at Oak Ridge under the Manhattan District?

A. Yes, under the Manhattan District the Union Carbide organization was operating the Oak Ridge Gaseous Diffusion Plant. Then in February of—no, it was May of 1947, the company assumed operation of the electromagnetic plant also at Oak Ridge, and in February of 1948 assumed operation of the Oak Ridge National Laboratory.

Q. Would you very briefly for us, Mr. Sapirie, explain what these two plants and the Oak Ridge National Laboratory are and the functions of each of them.

[fol. 102] A. The Oak Ridge Gaseous Diffusion Plant is a large industrial complex in which we enrich uranium in its 235 isotope. Normal uranium has approximately one

part in 140 of the U-235 isotope, and this is the fissionable part. The Gaseous Diffusion Plant isolates or concentrates this fissionable isotope for use in our weapons and civilian power programs.

The second plant at Oak Ridge is the Y-12 plant, which was originally constructed during the war for the separation of the isotopes of uranium by the electromagnetic process.

In 1947 this process operation was discontinued, and since that time the Y-12 plant has been converted to other production operations, including the fabrication of weapon components. And in addition, the Y-12 plant is also being used for the heavy engineering related to reactor design and controlled thermonuclear process development and biology research for the Oak Ridge National Laboratory.

The third major facility is called the X-10 site. This is the principal headquarters of the Oak Ridge National Laboratory, and at this site a large part of our reactor development work, chemical processing work, and many other research and development activities of importance to the AEC are accomplished.

Q. During the period from 1955 to 1957, what was the [fol. 103] relationship between the physical properties at Oak Ridge, Tennessee, which are under your direction and functioning under your direction, and the other properties elsewhere in Kentucky, Ohio, Missouri, and New Jersey that you have mentioned? In other words, just what was the relationship between the properties, and were any of these properties at Oak Ridge used for any function in connection with the operations of these other places out of state?

A. Yes, the facilities you mentioned are all part of an overall Government owned complex that performed two basic functions. The plants at Fernald, Ohio, and St. Louis receive the uranium ore or uranium ore concentrates and refine that material and converted it then into a green salt UF_4 , which is shipped to the plants at Oak Ridge and Paducah for conversion to UF_6 , which is the feed material for the gaseous diffusion plants. The refineries also convert part of the material to uranium metal and fabricate that metal into uranium slugs which are the feeds for the

plutonium production plants at Hanford, Washington, and Augusta, Georgia.

The plants at Paducah, Kentucky, and Portsmouth, Ohio, are gaseous diffusion plants which work as part of an overall complex with the Oak Ridge gaseous diffusion plant by doing a part of the overall operation.

The product from the Paducah plant is shipped by truck to the Oak Ridge gaseous diffusion plant for further [fol. 104] enrichment, and the tails or depleted material from the Oak Ridge gaseous diffusion plant is shipped to the Paducah plant for further enrichment in the U-235 isotope.

A similar arrangement exists between the Portsmouth gaseous diffusion plant and the Paducah gaseous diffusion plant. But in addition the product of the Portsmouth plant is transported by AEC truck with AEC couriers to the Y-12 plant at Oak Ridge where it receives further processing.

The laboratory at New Brunswick, New Jersey, is operated entirely by AEC employees rather than by a management contractor and performs a technical and analytical function related to the control of other Commission operations.

Q. At the Portsmouth, Ohio, plant and at the Fernald, Ohio, plant, are the operations, so far as actual operations themselves and not construction is concerned, carried on by management contractors somewhat similar to the method we use with Union Carbide at Oak Ridge?

A. Yes. The Fernald plant is operated under a management contract with the National Lead Company. The Portsmouth plant is operated under a similar management type contract with the Goodyear Atomic Corporation, which is a wholly owned subsidiary of the Goodyear Tire & Rubber Company.

Q. Are you familiar with what is known as the Savannah River Plant of the Atomic Energy Commission?

A. Yes.

[fol. 105] Q. Before you answer further, it is not a part of or operated under the Oak Ridge Operations for which you are responsible, is it?

A. No.

Q. Would you explain briefly though its operations and so on for us.

A. The Savannah River plant is the responsibility of Savannah River Operations of the AEC.

Q. Is Savannah River Operations a division of the operations of AEC just as Oak Ridge Operations is another division?

A. It is a field office of the AEC reporting to Washington in the same manner that Oak Ridge Operations reports to Washington.

Q. You call the Oak Ridge Operations a field office?

A. That's right.

Q. Go ahead with a description of the Savannah River Operations.

A. The Savannah River plant is a reactor plant in which nuclear reactors are used to transmute uranium 238 to plutonium 239 and also to produce other reactor products.

The feed material for the Savannah River plant is furnished by our plant—by our, I mean the Oak Ridge Operations plant at Fernald, Ohio.

The product at Savannah River is processed through [fol. 106] a chemical processing plant at that location to separate the plutonium that has been produced.

In this same chemical process the remaining uranium, which at that time is slightly depleted, in the U-235 isotope, is recovered in the form of orange oxide—that is UO_3 —and then is shipped to our gaseous diffusion plant at Oak Ridge for further enrichment.

Q. Do you know whether or not the plant at Savannah or the Savannah plant operates under a management type contract?

A. The Savannah River plant also operates under a management type contract with the DuPont Company.

Q. You have referred several times in your testimony to a word frequently used today and little understood. What is an isotope?

A. Well, an isotope is a part of a chemical element that is exactly the same as any other part from a chemical standpoint, but has a slight difference in mass or weight.

There are several types of isotopes. There are radioactive isotopes which have a slight difference in weight

but also have the characteristic of emitting radiation or being radioactive.

There are also stable isotopes which do not change their form, do not radiate, and are not radioactive.

Q. When you speak of an isotope, are you speaking of [fol. 107] a matter of substance of a given size, like a block or a given piece of material of a definite size, or is it a relative term?

A. Well, it is a specific size, but not in the terms of a block. It is extremely small, and has a specific size only with reference to its atomic weight.

For example, uranium 235 has the atomic weight or mass of 235. Uranium 238 is exactly the same chemically but it has the weight or mass of 238.

Q. What do you mean by mass or weight of 238, if you are going to define it so that even I could understand it?

A. The mass or weight is related to the periodic table of chemical elements under which hydrogen has the atomic weight of one. The uranium 235 therefore is 235 times as heavy as an atom of hydrogen.

Q. In your testimony thus far you have referred a time or two, to—I guess I call it—the insignia UF_6 . Will you explain what you mean by that.

A. Well, the compound UF_6 is made up of two different elements, uranium and the element fluorine. The compound, UF_6 has one part of uranium to six parts of fluorine.

Mr. Kramer: We have heretofore signed and there has been filed with the Clerk & Master, Stipulation No. 1 in this case. And in Stipulation No. 1 we have stated that there is being filed as an exhibit thereto a map of the Oak Ridge [fol. 108] area. And for the purpose now of getting the record correct, I am going to ask this witness to file this exhibit No. 1 as Complainant's Exhibit No. 1. He will so file it.

(Exhibit No. C-1 was filed.)

By Mr. Kramer:

Q. Now, Mr. Sapirie, I note that on the bottom of this Exhibit No. C-1 there are the figures "Total Area Encompasses 59,000 acres."

Our Stipulation No. 1 recites that the content of this area is 46,000 acres. I wish you would explain this difference.

A. This area of 59,000 acres is essentially correct for the Oak Ridge area as it existed in the period 1955 to 1957.

Since that time, however, we have been operating under the community disposal legislation requirement that we dispose of the community of Oak Ridge. We have also been operating under an executive order to dispose of any land excess to our current requirements through the General Services Administration.

As a result of these two activities, the area has since been reduced to approximately 46,000 acres.

Q. Perhaps it is not too material, because Exhibit C-1 shows the area during the period that is essential to the litigation, but for clarity, whereabouts on this area shown in this exhibit is the land that has been disposed of up to [fol. 109] the present time?

A. The land that has been disposed of is essentially the north corner of the area or the northeast quadrant.

Q. Mr. Sapirie, does the Atomic Energy Commission issue either annual or semi-annual reports setting forth the program and activities of the operations at Oak Ridge, or the Oak Ridge Operations rather, and operations of other field offices of the Commission?

A. The Atomic Energy Commission since January 1, 1947, has issued semi-annual reports until calendar year 1959, at which time a report was changed to an annual report. These reports summarize the overall program of the Atomic Energy Commission including that of Oak Ridge Operations.

Q. I hand you herewith a booklet or pamphlet headed or entitled "AEC Contract Policy and Operations." And it is dated January, 1951. What is that booklet?

A. That is the ninth semi-annual report issued by the Atomic Energy Commission.

Q. I will ask you to file that report—and I have furnished opposing counsel copy thereof—as Complainant's Exhibit No. 2, please.

(Exhibit No. C-2 was filed.)

By Mr. Kramer:

Q. I will ask you if in this report there is set forth the policy of the Atomic Energy Commission as it existed during the period material to this litigation, 1955 to 1957, with [fol. 110] reference to contract operations such as are carried on or were carried on in that period and are today by Union Carbide?

A. Yes. Part Two of this report summarizes the AEC contract policy and operations.

Q. Part Two begins, I believe, on page 41?

A. It begins on page 39, sir. It starts on page 39, and continues through page 56. Part III covers the Administration of Atomic Energy Contracts. It starts on page 57 and continues through page 71.

Q. So that the part of this booklet, Exhibit No. C-2, that we are interested in really as far as any information in the present litigation is concerned, lies between page 39 and page 71?

A. Yes, sir. I may have confused you here. This Part Two starts on page 39. Part Two is made up of three chapters. Chapter I on Contract Operations is on pages 39 and 40. Chapter II on Types of AEC Contracts, Their Uses and Execution, is from page 41 through 56. And Chapter III on Administration of Atomic Energy Contracts is on page 57 through 71. These are all part of Part Two of the semi-annual report.

Q. I call your attention to page 57 of this report and desire to read from this report:

"The firms operating large Government-owned production plants, carrying on extensive development projects, [fol. 111] and undertaking urgent construction jobs, work in close day-by-day cooperation with the Commission and its staff. They have been selected for their competence, and the Government is contracting with them not only for technical ability but for managerial ability as well. The working relationships between the Commission and its operating contractors resemble in some aspects those between industrial companies and their branch offices. The contractor undertakes to carry on an extensive operation; the Commission establishes the objectives and makes the decisions required to fit the operation into the national

program, and exercises the controls necessary to assure security, safety, desirable personnel administration, and prudent use of the public funds."

Can you state whether or not in its operations during the period 1955 to 1957 especially this operation of Union Carbide at Oak Ridge, Tennessee, was carried on in accordance with this provision?

A. Yes, sir, it was.

Q. I note there is stated in the portion of this report which I quoted this language: "The contractor undertakes to carry on an extensive operation. The Commission establishes the objectives and makes the decisions required to fit the operation into the national program, and exercises the controls necessary to assure"—certain things.

Would you comment on that briefly for us?

[fol. 112] A. Yes, the contractor performs certain functions essentially as our agent.

Q. When you say contractor, are you referring to Union Carbide?

A. I am referring to Union Carbide or any other so called management type contractors.

Mr. Rice: That last statement is objected to as a conclusion of the witness.

By Mr. Kramer:

Q. Now omitting reference to any other contractor and staying with Union Carbide, explain how and in what manner you think they correspond with this language.

A. The Union Carbide operation for the AEC at Oak Ridge is one in which we assign to the company's organization there the task of performing certain parts of the Commission's overall program. These assignments change from time to time, and in many cases from day to day.

We provide all of the facilities, the materials, and the funds for conducting these operations, and we establish procedures, schedules, and specifications and audit the performance to make sure that the Commission's requirements are met.

We also provide for the supply of materials from other Commission installations—

Q. May I interrupt long enough to ask what you mean [fol. 113] by "we also provide"?

A. By we, I mean Oak Ridge Operations of the Atomic Energy Commission, which has the primary responsibility and uses Carbide as one of the tools for getting the job done.

Q. You started to tell us about furnishing materials.

A. We furnish materials from other Commission operations or locations to Carbide which are worked on by Carbide, and after being worked on by Carbide, the product of that operation is then made available to other Commission facilities for additional work or for assembly into units for storage.

Q. In the course of this answer, you used the expression that certain processes or types of operations or portions of operations change from time to time, frequently from day to day. Would you give us a little information on what you mean?

A. Well, I might use a specific example.

Q. Very good.

A. Of the work being done in a part of the Y-12 plant, in which we—

Q. Remember I want you to keep in the main in the period '53 to '57.

A. Yes, sir. In which we cast uranium metal into shapes and machined those pieces into specific items under very close tolerance specifications, and then shipped those [fol. 114] units to other locations.

Now if the requirements of our customer—the Department of Defense—changed from time to time, it is necessary to modify those schedules. It is also necessary to modify those schedules quite frequently to reflect delays encountered in other locations in receiving or fabricating other components that must be assembled into a total unit or a total weapon.

Q. Does Carbide, or the personnel employed by it, have any discretion in the type of materials that they would use in carrying through the work that you have just made reference to, or is that entirely determined by the Atomic Energy Commission?

A. The type of materials in this particular case is determined entirely by the Atomic Energy Commission.

Q. Suppose that in the course of a day or succeeding day you change the type somewhat of material that is to be produced by Union Carbide under the directions you have outlined, is there any change in a rate of compensation that is paid to Carbide because you are changing the product and may change the time element for its production?

A. No. Carbide works under what we call a fixed fee for their management services, and that fee remains constant as long as the broad scope of the work is not substantially changed. We do, however, pay all of the actual costs [fol. 115] of accomplishing the work, and these actual costs vary from time to time as the schedules change and as the type of job changes.

Q. I notice on page 59 of Exhibit C-2 a portion headed "Integrated" Contractors. You use the term "Integrated" Contractors also in connection with Union Carbide.

What is meant by that?

A. An integrated contractor is a management type contractor whose work is a part of the Commission's overall operation and is conducted as if it was conducted by the Commission itself as one of our branch offices.

The cost records of the integrated contractor's activities are a segment of the Commission's overall cost records. The records are assembled by the Commission's headquarters in Washington into the overall financial report of the Atomic Energy Commission.

In addition we also operate other phases of the program with our integrated contractors as if they were operations of the Commission itself. We keep consolidated records of the source and fissionable materials assigned to the contractors, and in fact audit these records and become directly involved in the event there occur discrepancies which warrant direct participation by the Commission employees.

I might mention also that the integrated contractor works entirely with use of funds advanced by the Atomic [fol. 116] Energy Commission and set up in a separate account identified as Government funds.

Q. I am coming back in some detail to that either with you or someone else, but just the one general question: Union Carbide does, and did during the period here in-

involved, operate on funds furnished by the United States or by the Atomic Energy Commission?

A. That is correct.

Q. That detail we will save for later.

Now I will ask you to turn to page 64 of Exhibit C-2. Under the heading "Carrying Out Contractor Programs," I notice a reference to sites of major cost-type contract operations.

Is the Oak Ridge Operations, and Oak Ridge, Tennessee, particularly, in this instance, what you would call or what you do class as a major cost-type operation?

A. Yes, it is.

Q. Does AEC maintain a staff of its own employees there?

A. Yes, we do.

Q. Do the AEC employees at Oak Ridge do generally or perform generally the list of functions that are set forth in the provision to which I have just given reference?

A. They do, yes, sir.

Mr. Kramer: I recognize the fact that that question [fol. 117] calls for a conclusion, but I do that to shorten it. If it is objected to for that reason, I will go through it.

Mr. Rice: I don't object to it. Go ahead.

Mr. Kramer: We recognize that the Court will take judicial knowledge of congressional history, but for the convenience of all concerned, I want to file through you as Complainant's Exhibit No. 3 a compilation of the congressional history of the enactment of the 1946 Atomic Energy Act.

I don't care to read into the record at this time any portion thereof, but I consider all as a part of the record, and it is identified as Exhibit 3.

(Exhibit No. C-3 was filed.)

(A recess was had.)

By Mr. Kramer:

Q. I want to go back to page 59 of Complainant's Exhibit C-2, and I note that pretty well down on this page there is a reference to cost-reimbursed operating con-

tractors. And then I notice further down under the subdivision "a" where it says, "The salient points concerning accounting and financing under one of these AEC contracts are as follows: Contract operations are financed from funds advanced to this contractor by the Commission."

As the words "Cost-reimbursed operating contractors" are used in this paragraph, what do we mean?

A. Well, we mean the replenishment of the advanced fund account to repay that account for the expenditures [fol. 118] made in the immediate preceding period for the operations that the contractor is doing for the Commission.

Q. It is perhaps not too clear. Let me ask you this: Do you at a given time furnish to these people a given amount of money and later reimburse that fund?

A. We give them an advance of Government funds so that their operations are conducted entirely with use of funds advanced by the Government.

Now the amount of that advance varies from time to time in anticipation of changes in their rates of expenditure.

Q. Does the Atomic Energy Commission issue what we generally know as an AEC manual?

A. Yes, sir, the Atomic Energy Commission has a large manual that summarizes the operating policies and procedures of the Commission operations.

Q. Now that manual is, I take it, a printed volume or a series of sheets inserted as a volume which are passed out to the various Atomic Energy operations or field offices; is that right?

A. That is correct.

Q. Do you have with you a copy of the introductory portions of the manual which was in effect at the time we are now interested in?

A. I presume you are referring to the section summarizing the functions and delegations of the Oak Ridge Operations office.

Q. You do have such portion of the manual in your hands at the moment?

A. I have that portion of the manual in my hand, yes, sir.

Q. And consists of how many pages?

A. This consists of four pages.

Q. I will ask you to file these two sheets as collective Exhibit C-4.

(Exhibit No. C-4 was filed.)

Q. A little earlier in your testimony you referred to the method or manner perhaps of progress of the feed materials or fuel elements through the plant at Oak Ridge.

Do you have a sheet depicting that progress?

A. I have a sheet depicting the general progress which is not complete in every detail.

Q. I will ask you to file this sheet as Complainant's Exhibit 5.

(Exhibit No. C-5 was filed.)

Q. Will you explain briefly for the benefit of the Court what this sheet depicts and how it operates, how it functions.

A. This sheet shows the progress of the uranium from the time that it is delivered to the Commission as ore [fol. 120] through our refineries to the production of the material that is thereafter used as feed in the plutonium production plants or in the U-235 production plants.

Q. It shows the source from both foreign and domestic points of origin?

A. It shows the raw material—the ore or ore concentrates coming from both foreign and domestic sources.

Q. Who buys that material?

A. That material is purchased by the Atomic Energy Commission.

Q. As it proceeds on through this process, who owns the material at all times?

A. The material at all times is owned by the Atomic Energy Commission.

Q. Who determines the quantity and its method of use?

A. The method of use is determined by the Commission with certain limitations as reflected by the appropriation of funds by Congress, in the case of most of our operations, and by the President of the United States in case of the actual fabrication of weapons.

Q. Does the contractor, in this instance Union Carbide,

have any control or anything to do with the amount of material that is being purchased and used through this processing?

[fol. 121] A. The contractor does not have responsibility for establishing the amount of material that is furnished him or on which he works. He does have a responsibility for trying to meet the objectives established by the Atomic Energy Commission, which isn't always easy.

Q. Does this graph or sheet show the ultimate use of these fissionable materials by the Atomic Energy Commission or does it show only the use as made by a contractor, or this particular contractor Union Carbide?

A. This chart depicts the entire program going to the end use—either for defense purposes or for civilian uses in science, agriculture, industry, and medicine.

Q. So that at all times through this preparation of this reactor fuel and weapon parts, this material is owned by and is the property of the United States Government?

A. That is correct.

Q. Does the plant at Oak Ridge, Tennessee, which is operated by Union Carbide, furnish processed or fabricated materials to any of the other AEC plants?

A. Yes, it does.

Q. Briefly explain, please.

A. The gaseous diffusion plant at Oak Ridge, which is one of the three principal plants there, produces enriched uranium 235 which is furnished either to the Y-12 in Oak Ridge for additional processing or to civilian industrial firms for use in the civilian Atomic Energy program.

[fol. 122] To the extent that this is done, it is done for the account of the Commission and under orders supplied the contractor by the Commission.

The material that is sent to the Y-12 plant—

Q. Just a moment. When you say contractor, are you referring to Union Carbide?

A. In all cases I am referring to Union Carbide here.

Q. Proceed.

A. The material that is sent to the Y-12 plant is processed further by Union Carbide employees to purify the 1625 product, reduce it to metal, and fabricate it into specific shapes as directed by the Atomic Energy Commission. These shapes are then sent to other Atomic Energy Com-

mission management contractors for further processing or assembly.

Q. This further processing or assembling is not done at the Oak Ridge, Tennessee, plant?

A. That is not correct. We do some component assembly work at the Oak Ridge plant, but in every case, additional assembly or processing is done elsewhere.

Q. Still by AEC?

A. Still by AEC, and principally with use of management type contractors.

Q. Do you know the approximate amount of investment that the Federal Government or the Atomic Energy Commission had in the facilities at Oak Ridge, exclusive of inventory, as of, say, for the fiscal year ending June 30, 1956?

A. The part at Oak Ridge was approximately \$1,400,000,000. The total under Oak Ridge Operations at that time was approximately \$3,000,000,000—just slightly over \$3,000,000,000.

Q. Do those figures include inventory?

A. They do not include inventory. This is our plant account. Of that total \$1,400,000,000, approximately \$1,300,000,000 was contained in the three plants operated by Union Carbide.

Q. I believe we have here a statement issued by the Atomic Energy Commission giving the total investment at Oak Ridge and including additional figures. Before I offer to introduce this in evidence, will you tell me what it is? I generally described it. Can you tell me its source and so on?

A. This is the consolidated financial report for the fiscal year 1956 as issued by the Atomic Energy Commission Headquarters in Washington. It is made up of the financial records of all of our integrated contractors and direct AEC operations including the purchase of the raw material and other items.

Q. Is there any particular page that has special reference to the Oak Ridge Operations or Oak Ridge plants at Tennessee, and, if so, where do I find it?

[fol. 124] A. On page 396 you will find the summary of the plant and equipment located at Oak Ridge. This is the value of completed plant, and construction in progress.

On the preceding page, on 395, there are some other items that are the responsibility of Oak Ridge Operations—

Q. Would you identify those?

A. —that are not located at Oak Ridge.

These include the Kentucky item—Union Carbide Nuclear Company, Paducah.

It includes the Missouri item, the second item, Mallinckrodt Chemical Works at St. Louis.

We also have on page 396 under Ohio the Goodyear Atomic Corporation, at Portsmouth. That is an Oak Ridge Operations item.

We have the National Lead Company of Ohio which is at Cincinnati, which is another Oak Ridge Operations item.

We also have at that time under New York the Hooker Electrochemical Company at Niagara Falls, which is no longer under our Oak Ridge, but was at that time.

Q. We want to file this summary of financial report as Complainant's Exhibit 6.

(Exhibit No. C-6 was filed.)

Q. Can you give us the size of the personnel, that is, the number of personnel that were employed in any of these fiscal years at Oak Ridge, Tennessee, now alone—either your fiscal year which ended June, '55, or June, '56, or [fol. 125] June, '57.

A. I have the numbers for fiscal year 1957, which ended on June 30, 1957. For the employment at Oak Ridge, we had 978 AEC employees. That is our Government employees.

Q. Those are Government employees directly on the payroll of the Atomic Energy Commission?

A. That is correct. We also had at that time 14,125 Carbide employees, and 3,821 other AEC contractor employees.

Q. Would the last number that you have given include the employees of H. K. Ferguson Company and of other construction contractors?

A. That number includes the employees of the construction contractors working at Oak Ridge who are management type contractors. It does not include the employees of the fixed price contractors employed there at that time.

Q. Were there a number of employees of contractors who were operating under fixed cost type of contracts?

A. Yes.

Q. Or lump sum contracts we generally call them?

A. Yes. Our normal practice is to maximize use of competitive bid fixed price contracts. We use the cost-type management contract only in those cases where time limitation or other factors prevent us using fixed price competitive bid contracts.

[fol. 126] Q. Inasmuch as there is a companion case on the docket of this Court known as H. K. Ferguson Company case, is the H. K. Ferguson Company contract one of the management type contracts?

A. That is correct. The H. K. Ferguson Company is our principal management type construction contractor operating on the Oak Ridge area.

Q. Do you have with you here or do you know even the number of employees that these lump sum contractors had at any time during the fiscal year '56-'57?

A. I don't have it with me. I can get it and supply it to the record.

Q. I believe we should have it. Will you get it and will you furnish it to us.

(Discussion was had off the record.)

Q. Will you obtain and furnish to the court reporter the number of such employees, it being based on the same method of counting that the figures you have already given are based?

A. I will provide the same type information for the same period for the record.

Q. When this is furnished, the reporter will so insert it in the record.

[fol. 127] (Reporter's Note: The following information was supplied in answer to the foregoing question, through Mr. Kramer:)

A. During the fiscal year ending June 30, 1957, the average number of employees of all contractors operating on the Oak Ridge area, whose contracts were not of the management type, was 396.

The peak number of such employees during that fiscal year was 473, this period of peak employment being during the month of November, 1956.

During the fiscal year ending June 30, 1957, the Atomic Energy Commission awarded seven prime contracts for a total contract price of \$2,320,361; Carbide awarded 49 subcontracts for a total contract price of \$1,120,833; and the H. K. Ferguson Company awarded 9 subcontracts, for a total contract price of \$183,297.00. None of these 65 contracts was of the management type.

[fol. 128] Q. Do you have with you a record taken from your records at Oak Ridge showing the payroll of the AEC employees for this fiscal year July 1, 1956, to June 30, 1957, and also showing the payroll for the Carbide employees for the same period?

A. I do.

Q. Will you give it for the record, please.

A. The total payroll for the AEC employees at Oak Ridge for the fiscal year is \$5,772,000.

Q. For Carbide employees?

A. For the Carbide employees again at Oak Ridge for the entire fiscal year, the total was \$85,638,000.

Q. And that entire payroll as far as Carbide is concerned was reimbursed to Carbide?

A. That entire payroll was paid out of their account of AEC advanced funds, and that fund was then replenished.

Q. Do you also have the payroll for that fiscal year to the other AEC contractors, the management type contractors?

A. I have the payroll for the cost-type management contractors at Oak Ridge other than the Carbide. For the same fiscal year, the total was \$14,656,000.

Q. Can you give us from the records the amount of money that was expended or the cost of materials and services, supplies, and equipment that were procured from [fol. 129] others by AEC and its management contractors which, of course, includes Carbide for use in or in connection with the AEC operations conducted at Oak Ridge alone during that fiscal year?

A. That number was in excess of \$195,000,000.

Q. How much of that was for utilities?

A. Approximately \$67,000,000 was for utilities procured in Tennessee.

Q. Now have you had those responsible for these records attempt to determine what percentage of the procurements

for services, supplies, and equipment were placed with suppliers and vendors in the State of Tennessee?

A. We have made a rough computation that in excess of 24 per cent of the remainder—by remainder, I mean exclusive of the utilities which were procured entirely in Tennessee—24 per cent of the remaining procured services, supplies, and equipment were placed with suppliers or vendors in Tennessee.

Q. Applying that percentage then would mean that about \$100,000,000 was dispersed in Tennessee of these monies?

A. That is correct.

Q. Do you have the figures which show the approximate amount of expenses of AEC for operations and services conducted by Carbide?

A. For the same fiscal year?

Q. Yes.

[fol. 130] A. The fiscal year 1957, expenses totalled \$265,000,000. However, this includes the cost of electricity and other items furnished by the Atomic Energy Commission.

Q. Does that include process material?

A. This total does not include the process material. No. The value of process material is normally kept separate from these records.

Q. What do you mean by process materials now?

A. Well, process materials are the materials which are worked on by the management contractor in these particular plants. The process material varies at the different stages in the production chain. For example, the processing material furnished to a feed material contractor would be uranium ore or uranium ore concentrate. The result of his efforts then becomes the process material furnished to the next management contractor in the chain. That contractor, if it is a gaseous diffusion plant, would convert the material to the exact chemical form needed for this operation and would then enrich that material in the U-235 isotope by processing it through the plant.

Q. So that we can understand it, tell us so far as you can—and if I get where I am supposed not to go, stop—tell us so far as you can what is the type of processing material that Union Carbide used during the period involved in this litigation.

[fol. 131] A. You are referring specifically to the gaseous diffusion plant at Oak Ridge?

Q. I am referring to all plants at Oak Ridge that Union Carbide operated.

A. Well, there are many different types of material.

Q. That is the reason I put that question that way. Go as far as you can and tell us what you can about it.

A. The principal material used at the start of the process at the Oak Ridge gaseous diffusion plant is either one of three materials. One form of the material is UO_3 , an orange oxide of uranium which is shipped to the Oak Ridge gaseous diffusion plant from the Commission's facilities at Savannah River and at Hanford, Washington.

The second form of material is the UF, or green salt, which is shipped to the Oak Ridge plant from one of our feed material refineries at Fernald, Ohio, or Weldon Spring, Missouri.

The third form of material used is the product of the gaseous diffusion plant at Paducah, Kentucky, which is sent to the Oak Ridge gaseous diffusion plant for further processing or further enrichment as it is called.

Q. Can you tell us the amount or the approximate amount of AEC owned process material that was used in the operations—and I mean dollar amount—in the operation at Oak Ridge, Tennessee, during the fiscal year we have just [fol. 132] been referring to?

A. During that specific 12 month period, those materials had a cost basis in excess of \$570,000,000. These are all costs that have been borne by the Atomic Energy Commission at the various steps in the process chain before the material is delivered to the Oak Ridge gaseous diffusion plant.

Q. My attention has been called to the fact that I may not have limited my question and probably you did not your answer. In all the figures that you have been giving in the last few minutes, we have been referring alone to operations at Oak Ridge, Tennessee?

A. That is correct. I tried to be specific on that point.

Q. What is the duty and function of the employees of AEC at Oak Ridge? And remember, I am trying to stay in the period involved here, 1955 to 1957.

A. The AEC employees at Oak Ridge are principally a part of Oak Ridge Operations. I say principally because we do have one exception in that there are stationed at Oak Ridge approximately 200 AEC employees who are part of the Washington headquarters and are stationed there for convenience.

The remainder of the Oak Ridge organization of AEC employees are charged by the Commission in Washington with the responsibility for managing the Commission's program as assigned to Oak Ridge Operations.

[fol. 133] Q. Would you break your staff down briefly into your grouping of your assistant manager and functions under you?

A. I have a deputy manager reporting directly to me plus three assistant managers. These assistant managers are—

Q. Wait just a moment. I want to at this time file as Complainant's Exhibit C-7 an organizational chart. I will file this at this time because it may be helpful as you discuss the set-up of these employees.

(Exhibit No. C-7 was filed.)

Q. You will now proceed.

A. As I mentioned, the organization has a deputy general manager—who, by the way, is not shown on this chart.

Q. Did it have such position in 1955, '56 and '57?

A. Yes.

Q. Go ahead.

A. And three assistant managers—one, assistant manager for administration; secondly, an assistant manager for operations; and third, an assistant manager for construction and engineering.

I also had, reporting directly to me as Manager of Operations, area managers in six field offices outside of Oak Ridge.

[fol. 134] Q. All of these are identified on the exhibit which we have just filed?

A. All with the exception of the deputy general manager.

Q. Would you mind describing to some extent the type of personnel that is employed on the various divisions of your staff?

A. My staff is made up of administrative, technical, and

professional engineering and scientific employees who are experienced in the various types of operations that we have responsibility for. They are assigned in the organization in accordance with functional and operating divisions. The functional divisions principally report to the Assistant Manager for Administration, and are made up of Budget and Reports Division, Contract Division, Finance Division, Organization and Personnel Division, Supply Division, and Security Division. The Security Division does have some operating responsibilities also.

Under the Assistant Manager for Operations we have a Production Division, a Feed Material Division, a Research and Medicine Division, and at the time of this chart we had an Isotope Division which has since been transferred to Washington. But now we have a Reactor Division which is added and was not in existence at that time.

Under the Assistant Manager for Construction and [fol. 135] Engineering, we have an Engineering Division, a Construction Division, an Area Construction Division, and a Special Projects Division.

This is the organization as it existed at that time. Since then we have discontinued the Special Projects Division and the Construction Division as such, although we do have the Area Construction Division which handles the consolidated function of both of those divisions.

Q. Are there employees, or were there during this period of time, of AEC included in the number you have heretofore given that would be classed as laborers? Do some of these divisions have laborers in their employ?

A. We have no employees that you would call laborers. We do have some lower grade technical or lower grade clerical and administrative employees.

Q. Is there any group of these employees or is there any division of your staff that is responsible for the rate of production and the type of production that is coming forth from the plants operated by Carbide?

A. The basic establishment of the production requirements are given to me by our headquarters in Washington. I have within the Oak Ridge Operations organization a Production Division which in turn breaks that overall assignment down into specific assignments for the various management type contractors in various plants. And the

Feed Material Division performs a similar function with [fol. 136] respect to the breakdown of the refining and feed processing operations between the Fernald and Weldon Spring plant as parts of the total assignment made to us by the headquarters in Washington.

Q. How much familiarity is required of these people that fall within the classification you know as Feed Materials Division or Production Division of the operations? How intimate do they have to be with the operation?

A. We have some technical employees in these divisions who are completely knowledgeable on all aspects of our production operations.

Q. How close do they stay to these operations?

A. They maintain day to day contact with our management type contractors, and in addition they review the reports and records of the contractors and make periodic audits of various functions of the management contractor's overall operations.

Q. What about visiting the plant or plants by your personnel, AEC personnel?

A. Our personnel have direct access to the different plants on a "need to know" basis.

Q. Explain, please.

A. I am not going to use this as an exhibit, but on the AEC badges we have color codes that entitles the specific employee to access to different plants.

[fol. 137] Q. What is an AEC badge?

A. An AEC badge is a picture badge, identification badge that is furnished by the Commission to each Atomic Energy Commission Government employee. Our management type contractors have a badge that is somewhat similar, but which is issued to them and accounted for by the management type contractor. The badge he has admits him to access only to those Commission owned facilities which are part of his management responsibility.

The badge I have here admits me to any of the AEC plants under Oak Ridge Operations. Some of our AEC employees will have a badge similar to this with only one code on it, some with many more.

Q. Do the employees of AEC visit these plants, the Y-12 gaseous diffusion, and so on, from time to time?

A. There are daily visits to the plants by AEC em-

ployees, and in fact, some of our employees are actually stationed in the plants.

Q. Why? That is what I am getting at. Why are AEC employees stationed within the plant when the operations are being carried on directly by Union Carbide?

A. Well; even though the Commission employs a contractor to perform a management function, it does not relieve itself of the responsibility for that function. Consequently we are required to have AEC employees handle certain specific appraisal and review functions to make sure [fol. 138] that the operation is being conducted in accordance with the Commission requirements.

Q. Suppose that the person or the personnel of the Atomic Energy Commission who are in the plants or who visit the plant and upon the occasion of their visits find something that is not in their opinion up to the standard or up to the requirements, what is done?

A. It depends on the degree of the problem. In the event it is a minor disparity that could be the difference in judgment of one person to another, the matter is discussed in an informal manner with the counterpart within the contractor's organization.

If the problem is one that is more serious in nature and one that justifies official record documentation, that is then handled by official correspondence from the person in my organization who is assigned the contract administration responsibility for that particular activity to send a letter to the person that the contractor has designated as having the particular responsibility within the contractor's organization.

Q. What does AEC personnel have to do with development of plans or arrangements for future use of materials or machinery and equipment?

A. We are—by we, I mean the Atomic Energy Commission [fol. 139] is conducting a continuous process, improvement and development program, largely through assignment to our various management-type operating contractors. As they improve the process in their development efforts, we attempt to modernize our plants to reflect these improvements. These changes are handled as budgetary items, which, after appropriation of funds by Congress, are handled largely through the employment by the Atomic

Energy Commission of architect engineer contractors to handle the design and construction contractors to handle the construction.

However, we quite often call on the management type contractor to provide assistance in various stages of this process. He sometimes does the engineering scoping. He quite often provides basic technical data to the design contractor, and in some cases actually does the design with his own organization.

The construction is handled by other contractors, however, since our management type operating contractors have no provision for construction by the contractor's own forces.

We sometimes do, however, permit the operating contractor to handle the smaller construction jobs through subcontract. These cases, however, are specifically approved by the Atomic Energy Commission organization.

Q. Suppose you permit the management contractor to do some of these small construction jobs you have just referred to. Does the fact that he takes on that additional [fol. 140] duty or obligation and additional work add to his fee?

A. It does not add to his fee. It does increase the costs that go through his contract, which are paid for by the Atomic Energy Commission.

Q. Incidentally, that brings this to mind: How close supervision over these expenditures of funds that you have previously advanced to Carbide do you keep? How close supervision and just what nature of supervision over that do you keep? Do you turn loose a sum for the pay period and they spend it, or explain how that is?

A. Because of the large amounts of money involved and the fact that we try to minimize the size of the bank balances in these independent area—in the management type contractor accounts, we anticipate or estimate the amount of his expenditures for the succeeding period of from two to four weeks, and advance him funds to satisfy the expenditures that he will experience during that time.

We also have financial audits made of the manner in which his expenditures are handled. And we have previously or prior approved procedures under which he operates. His records of his expenditures are made avail-

able to the Commission and are consolidated with other Commission records. In addition, his records are available for audit by representatives of the General Accounting Office.

[fol. 141] Q. Mr. Sapirie, who establishes the program and the production rates and so on that is carried on? AEC or the contractor?

A. The total programmatic scope is determined by the Atomic Energy Commission.

Q. Who determines whether there is going to be an increase or a decrease in the facilities or in the plant size and equipment that is therein?

A. You might say the final determination is made by Congress when they appropriate the funds.

Q. Assuming that you have the funds or that the funds are appropriated, who determines it?

A. The decision as to the facilities to be installed is made by the Atomic Energy Commission. Sometimes we receive recommendations from our management contractors of specific facilities that would be helpful in increasing the efficiency of the operations. We encourage our contractors to operate at maximum efficiency. When these recommendations are received, we have our own employees analyze the recommendations, and if we concur in the Carbide organization's recommendations, we will then forward the recommendation to Washington for inclusion of the item in the next budget and/or the next appropriation request if the item is large enough. Or if the item is small enough, we can sometimes handle it within a broad account that we have for general plant projects.

[fol. 142] Q. Is that same method true of handling or replacement of machines or equipment which need replacement due to obsolescence or due to wear and tear?

A. Yes, we have a budgetary control on the amount of money that can be spent in the equipment category.

Q. But you people at AEC control it and not the contractor?

A. The AEC controls the amount of money included which must be justified by the specific equipment requirements, where large size equipment is involved. We do provide the operating contractor with some flexibility for handling smaller size equipment requirements.

Q. Suppose that at this plant, as you do have, as I understand, alternating processes—you can use either one or the other to obtain a result. Who determines which process will be used? You or the contractor?

A. For the major operations, the process is determined specifically by the Atomic Energy Commission.

Q. Suppose a portion of your plant is not going to be used for a while. Who determines about the method of putting it in stand-by condition and things of that sort?

A. The determination is made by the Commission. Here again we encourage the contractor to make recommendations when the efficiency of the operation can be increased, but in every case his recommendations are reviewed independently by our own employees, and the final decision is [fol. 143] made by the Commission.

Q. I believe you have already testified with reference to advance planning for future expansions.

A. The advance planning for future expansion is directed by the Commission, and we use all of the management type organizations available to us who can contribute to it to participate in that type of planning.

Q. Now you have already testified in giving your figures that there is an enormous amount of electricity used. Incidentally, can you give us any idea of comparison between the amount of electricity used there and used elsewhere, either in Tennessee or elsewhere?

A. Yes.

Q. Going back to this time.

A. At the particular time in discussion we were using 19,000,000,000 kilowatt hours of electric energy at the AEC facilities in Oak Ridge. The remainder of the State of Tennessee, exclusive of the Oak Ridge area, at the same time was consuming 16,000,000,000 kilowatt hours of electric energy per year.

Q. So that you were using more there, consuming more there, than all the rest of the state put together?

A. That's correct.

Q. Is this electric energy purchased or is any part of [fol. 144] it produced at Oak Ridge?

A. We produce approximately ten per cent of it in an electric generating station owned by the Atomic Energy Commission within the Oak Ridge area.

Q. Is that operated by this contractor?

A. That is operated by the Union Carbide organization at the gaseous diffusion plant.

Q. At Oak Ridge?

A. That's right, under the management contract for their Oak Ridge operations.

Q. Go ahead.

A. The remainder—by the way, I might mention that in the operation of our own station there we are using a substantial amount of gas which is purchased by the Atomic Energy Commission under a contract with the East Tennessee Natural Gas Company.

We are also using coal there, and from time to time that coal is purchased by the Atomic Energy Commission, and at other times it is purchased under our general direction by Union Carbide.

Q. When purchased by Union Carbide, how is it paid for?

A. It is paid for by Union Carbide out of the advanced fund that has been made available to them.

Q. Go ahead.

[fol. 145] A. And at times when we give them this assignment, of course, we reflect this additional requirement in the amount of funds made available.

Q. In other words, then, that is a thing you control. Sometimes you pay it. I mean AEC.

A. That's right.

Q. Sometimes you direct them to pay it?

A. That's right.

Q. Go ahead.

A. The remainder of the electric power used at Oak Ridge is approximately 90 per cent of our total requirements is supplied by the Tennessee Valley Authority under contracts that our AEC employees negotiated with the Tennessee Valley Authority.

However, we call on Union Carbide as our operating contractor to do many of the specific functions related to the delivery and measurement and use of this electric energy that TVA supplies.

Q. I take it then in this use of these vast quantities of electric energy there are a lot of technical problems involved with reference to the handling, measuring, and so

on, of this amount of electric energy or current. Who is responsible for that, and how is it handled?

A. Well, the Atomic Energy Commission organization has the complete responsibility, and the manner of handling [fol. 146] has changed from time to time.

For example, under the 1947, '48 and '49 operations, we had an AEC group within our organization of Government employees to actually do the switching operations. We have since reassigned that function to Union Carbide, and they handle the switching for us.

The Union Carbide also has been assigned the function of direct communications with the power dispatcher of the Tennessee Valley Authority to coordinate the detailed scheduling and delivery of the power.

However, the primary decisions regarding the amount of power to be used at any time are retained as responsibility of the AEC personnel. And if there are any contract modifications with TVA, we make those.

Q. How close a knowledge of the operations is necessary in connection with this—of the operation of the plants is necessary with the procurement of this electric energy and the quantity thereof? In other words, how closely is that related to the processing that is going on at Oak Ridge?

A. Well, it is directly related because the productive capacity is to a large extent a function of the amount of electric power used. So the knowledge of the process requirements to satisfy a specific production objective must be made by the Atomic Energy Commission.

Q. And is made and was during this period of time? [fol. 147] A. That is correct.

Q. In view of the fact that you have earlier referred to this operation at the New Brunswick laboratory up in New Jersey, what is the connection between that and you people out there and Carbide out here at Oak Ridge?

A. The New Brunswick laboratory is somewhat unique among our operations as it is the only operation that is handled entirely by Atomic Energy Commission Government employees.

That laboratory is basically an analytical laboratory which is used to provide a control function for many of our other production operations. The laboratory also does

some research and development work towards the development of more precise methods for analyzing the source and fissionable materials with which we work.

Q. Is there referred from the Oak Ridge plant to this laboratory at New Brunswick any particular problems or items of operation or development from time to time?

A. Well, there are a number of different interchanges. We look to the New Brunswick laboratory as our final authority on the analysis of samples, and in some cases where we have a discrepancy between the analysis made by the shipper and the analysis made by the receiver of a particular shipment, samples would be sent to the New Brunswick laboratory to act more or less as a referee to [fol. 148] come up with an official decision.

Q. Is that done by you or done by Carbide when you send the samples?

A. The samples are sent by Carbide to New Brunswick. We, of course, establish the type of occasion on which such sampling arrangement is to be used.

Carbide also withdraws from the gaseous diffusion cascade at Oak Ridge samples of uranium hexafluoride, UF_6 , in various degrees of enrichment in the U-235 isotope, and the samples of this material are then sent to the New Brunswick laboratory where it is converted into standards which are used throughout the atomic energy industry.

Q. Are there any special methods of accounting and of control procedures set up in connection with source and special nuclear materials?

A. Very definitely.

Q. Who sets them up and how are they handled?

A. The Commission has established a specific procedure which is used by all of our management contractors to maintain a record of the source and fissionable material in their possession at all times.

Q. That is in whose possession? In AEC or the contractor?

A. In the physical possession of the particular management type contractor operating any particular facility. [fol. 149] The procedures also define the manner in which the material is to be inventoried and accounted for, and the Commission has an organization of AEC Government personnel, accountability employees, who audit the contrac-

tor's records from time to time to determine the compliance with established procedures and the accuracy of these records.

Q. What becomes of, or what is the method of handling these reports of inventories?

A. These inventory reports are submitted to the AEC operations office having responsibility for the specific operation, at which point they are consolidated into records for that operations office.

These records in turn are submitted to Washington where they are consolidated into the record of the Commission as a whole for all source and fissionable material. So that at all times the Commission knows the amount of these materials which it has and the specific location of these materials.

Q. I believe you have already testified that AEC exercised the control over these materials. Now who establishes the procedure for moving these materials from one place to others? In other words, Carbide needs some of this material. What is the procedure of the handling?

A. It depends on what the specific material is. If the material is normal uranium or lowly enriched uranium, [fol. 150] that material is provided by the Commission from another installation with use of either common carrier transportation provided by the Commission or contract carrier also under prime contract with the Commission.

However, if the material is more highly enriched material and is more valuable or more sensitive, the shipments are made on Government equipment, Government trucks and trailers—and in some cases a Government airplane, and in some cases railroad express shipments accompanied by AEC security patrol employees.

(Whereupon, at 12:10 o'clock p.m., a recess was had until 1:30 o'clock p.m.)

By Mr. Kramer:

Q. Mr. Sapirie, we have been referring this morning to the contract between Carbide—which we were using as an abbreviation for the complainant or one of the complainants in the present suit—and the Atomic Energy Commission.

I have here prepared for an exhibit a collective arrangement consisting of 293 pages, which in reality consists of Supplemental Agreement No. 27 and subsequent supplemental agreements through No. 37, to Contract No. W-7405-ENG-26.

I believe that Contract No. W-7405-ENG-26 was the original contract between Union Carbide and the Atomic Energy Commission?

A. That is correct.

[fol. 151] Q. Was this original contract rewritten?

A. The Supplement No. 27 is a complete rewrite of the basic contract plus the modifications through 26.

Q. Do these pages that I have here which I hand you copy of comprise the contract as it existed during the period involved in this litigation?

A. It does. The reason I hesitate is that some of the later supplements, particularly that summarized in modification 37, were not applicable throughout the term of the litigation.

Q. But the original contract plus the supplemental agreements, to and including Supplemental Agreement No. 26, were not a part of the contract in effect between Carbide and AEC during any portion of this litigation; in other words, the first part back of this?

A. Not except as rewritten in Modification No. 27.

Q. In other words, that portion of the contract, the original contract through the first 26 supplements, which was still in effect, at any portion of the period now involved in this litigation, is included in these papers?

A. Correct.

Q. Modification No. 37, which begins at page 73 of this exhibit, became effective on June 14, 1956, and that Modification 37 is in reality a second rewrite of the entire agreement, is it not?

[fol. 152] A. That is correct.

Q. Modifications or Supplemental Agreements 28 through 36 are modifications only of certain specific portions of the contract and became effective at different dates as is indicated therein?

A. That is correct.

Q. We want to file this contract as Complainants' Ex-

hibit 8, the same being more or less of a collective agreement consisting of 293 pages.

(Exhibit No. C-8 was filed.)

By Mr. Kramer:

Q. In the questions that I have recently been asking you, I have stated that this exhibit consisted of Supplemental Agreement No. 27 through Supplemental Agreement No. 37. I find now that I am in error, and on page 114 of this exhibit is in reality Supplement No. or Modification No. 38. Is that correct?

A. That is correct.

Q. The effect of Modification No. 38, page 114 of this exhibit, seems to be only one, and that is to change the name from Union Carbide & Carbon Corporation to Union Carbide Corporation. Is that correct?

A. That is correct. That was effective May 1, 1957.

Q. Was that because the contracting party, Union Carbide, was a different entity or is it merely a change in name of that entity?

[fol. 153] A. It is merely a change in name of the corporation.

Q. Why was the contract rewritten, Mr. Sapirie, as appears in supplemental contract or Modification No. 37?

A. The rewrite in Mod 37 was intended to reflect more accurately the actual operating relationship between the contractor and the Government.

The contract historically grew from a document that was entered into initially between Manhattan District of the War Department during the war, and was modified a number of times under the Atomic Energy Commission's operations to reflect changes in scope and the requirements of the Atomic Energy Act of 1946, and the Atomic Energy Act of 1954, and modifications of these two acts, and to reflect the operating policies and procedures of the Commission.

However, the complete rewrite in Supplement No. 37 was intended to bring up to date the contract to reflect the existing relationship between the Government and the contractor which had not been too accurately defined in the earlier contractual relations.

Q. Was there in reality any real difference in the method of operation after this Supplemental Agreement No. 37 went into effect than that before?

A. There was no change in method of operation. I think Supplement 37 does a better job of describing the [fol. 154] operation as it existed both before and after the date of that modification.

Q. The Atomic Energy Act of 1954 refers to licensing requirements. Has any provision of the Act any application to what is going on in Oak Ridge?

A. Well, Oak Ridge is assigned the responsibility for administration of a large number of the Commission's license agreements. However, the Government's direct operation at Oak Ridge, such as those handled by Union Carbide under their management contract, does not require licensing.

Q. I am really driving at this, which you answered or partially answered there: There is a provision in the Act for the licensing of the use of patents and so forth. Does AEC require a license or grant a license to Carbide for any use of any of the patents there?

A. Not for the Carbide operations under this particular contract.

Q. For any of the functions it performs under the contract, does it require a license?

A. It does not.

Q. Granting a license?

A. It does not. Union Carbide's private activities, which are handled by other divisions of the company and at other locations, could well require license agreements.

Q. I am not interested in the operations of Oak Ridge [fol. 155] elsewhere, although it is engaged in many operations aside from its operation of the Oak Ridge facilities.

A. Carbide.

Q. Carbide is. Yes, Union Carbide. But with reference to which Oak Ridge is no wise connected?

A. That is correct.

Q. And in those operations it is treated—and when I say those operations, I mean outside of those under its contract—it is treated the same as any other person or corporation?

A. That's correct.

Q. I think we have here a photograph that shows the plants. There are two of these photographs, and I am going to ask you to file them and have the court reporter to identify the two of them as Complainants' Exhibits 9-A and 9-B.

(Exhibits C-9-A and C-9-B were filed.)

Q. Will you explain for the record briefly what Complainants' Exhibit C-9-A shows?

A. C-9-A is a broad perspective picture of the Oak Ridge gaseous diffusion plant.

Q. What is C-9-B?

A. C-9-B is a close-up shot of the side of one of the diffusion plant buildings.

Q. I think the original gaseous diffusion process building [fol. 156] was known and is known as you have referred to it this morning as K-25.

Would you give us some idea of the size of that structure, its ground area, and so on?

A. The K-25 building is a U-shape building with each leg of the U being approximately 2540 feet long and approximately 400 feet wide, and some 60 feet high. This is an area of something on the order of 40 acres of ground covered by this one building.

Q. Could you on C-9-A pinpoint that in any way with a pen mark or anything on here?

A. Yes. The K-25 building is the building almost exactly in the center of the picture running lengthwise of the picture.

Q. I wonder if you would take a pen—I think pen will show on this—and draw an outline of that building right on the picture itself.

A. (Indicating on exhibit)

Q. Taking this Exhibit C-9-A that you have drawn the dim ink line around to indicate the building about which I previously questioned, what other buildings are shown in that exhibit?

A. Well, the principal major building shown on the exhibit other than K-25 is K-27. That is in front of the K-25 building.

[fol. 157] Q. Is that the nearest building, the large one?

A. It is the nearest large building.

Q. And what is that identified as?

A. That is K-27. That was constructed towards the end of the war.

Q. And is still in use or was in use during this period?

A. That is correct. In back of K-25, the large building under roof that you see—

Q. That is just this side of the smoke stacks as you see it?

A. It is the big building in front of the smoke stacks.

Q. Yes, all right.

A. That is the maintenance building, as it was called in those days, the conditioning building.

Q. There is another building shown here. What is it?

A. There are several others there. Which one are you referring to?

Q. The one I had reference to is the one you see the two high smoke stacks.

A. That is the steam heating plant for the gaseous diffusions plant.

Q. Is operated along with the gaseous diffusion plant? [fol. 158] A. That is correct.

Q. Is operated by Carbide under the contract?

A. It is operated by Carbide under the contract. That is not the power plant. The power plant is not shown on this building or photograph.

Q. Are there other buildings that are a part of this gaseous diffusion plant that are not shown on this photograph?

A. Yes, there are several subsequent additions to the plant.

Q. Do you mean subsequent to 1957?

A. Subsequent to the time this picture was taken.

Q. But were used during 1945-1957 period?

A. Yes. There is an addition known as K-29 which would be immediately above the K-27 addition.

Q. When you say above, would it be to the right-hand as you face it?

A. To the right-hand as you face the photograph.

And the K-31 addition, which would be immediately off the photograph on the left, and the K-33 addition which would be to the left of K-31.

There are also a number of auxiliary buildings and the

office building which are not shown, and in addition the photograph does not show the electric generating station which supplies part of the power requirements for this plant.

[fol. 159] Q. What direction is it from this, what is shown?

A. It would be off the picture to the right approximately a mile.

Q. You filed as Exhibit No. 1 to your testimony a map showing the entire Oak Ridge area. And on that map there appears a shaded area designated as K-25. Are these buildings located on that map?

A. Yes, sir. The area shown in that shaded area is the area that is shown on this map. However, the K-31 and K-33 shaded areas are not shown on this map.

Q. You mean not shown on the photograph?

A. Not shown on the photograph.

Q. They are all shown on the map?

A. Yes, they are all shown on the map. That is looking north or almost due north.

Q. Which one are you referring to as you face it? Are you referring to Exhibit 1 or are you referring to Exhibit C-9-A?

A. We are referring to C-9-A, the photograph, which is taken looking in a northerly direction.

Q. What is the stream of water shown there, do you know?

A. That is Poplar Creek.

Q. Can you tell us what the acreage is for the entire area that we are talking about here?

[fol. 160] A. The entire plant area within the gaseous diffusion plant fence is approximately 400 acres.

Q. And the operations are carried on in all of these buildings?

A. Let me correct that number. That is approximately 600 acres for that entire complex. It contains more than 75 buildings.

Q. All of which are operated or used in the operation under the Carbide contract?

A. That is correct.

Q. Now let's go to Exhibit C-9-B. Is there any explanation that you want to make of that?

A. I think not. That is rather typical of the process buildings in the gaseous diffusion plant.

Q. This morning in discussing the gaseous diffusion plant, you told us that this was a large scale separation of uranium isotope 235.

Would you go a little further into detail on the method that is used in connection with these functions?

A. May I use the schematic diagram on that?

Q. You may. Let me file first this schematic diagram. I show you a sheet of paper that is headed "Process gas flow in K-25 gaseous diffusion process," and ask that you file that as Exhibit C-10.

(Exhibit No. C-10 was filed.)

[fol. 161] Q. Now using Exhibit C-10 so far as you want to, describe it briefly for us, please.

A. As I mentioned this morning, uranium as it occurs in nature is made up of isotopes, uranium 238 and uranium 235, with uranium 235 occurring in a natural abundance of about one part in 140. The two isotopes of course are chemically alike. Therefore, the separation of the isotopes, in order to get a concentrated uranium 235, must be a physical separation. This separation is accomplished by using the uranium in a gaseous form, as uranium hexafluoride, UF_6 , which is a stable compound of uranium and pumping that gas through many stages which contain a barrier material—

Q. That is b-a-r-r-i-e-r?

A. B-a-r-r-i-e-r. The uranium 235 being slightly lighter in mass or lighter in weight than uranium 238 moves slightly faster. Therefore, it bumps up against the barrier slightly more frequently. In doing so, it diffuses through the barrier at a slightly faster rate than the uranium 238.

The part of the gas that diffuses through the barrier is then pumped into the next higher stage. The part that is not diffused through the barrier is pumped to a lower stage where it is mixed with the enriched gas stream from a still lower stage to be pumped through the stage immediately below the one shown on the diagram.

The part of the gas that has diffused through the [fol. 162] barrier is mixed with the stream that is coming

from the stage above as the depleted stream and is pumped through the middle stage that you see.

By having thousands of these stages, it is possible to achieve the degree of enrichment that is required for our final product.

A plant of this type is unique in industry and requires operating techniques and equipment never before used in industry. The pumps that we use for moving the gas from one stage to another are pumps that have been developed specifically for this particular plant use. The plant operates at slightly less than atmospheric pressure, so that any leakage that occurs is an in leakage.

Q. Is what?

A. An in leakage. Leaks into the plant. However, in order to minimize plugging of the barrier and corrosion of the plant equipment, it is necessary to minimize the in leakage. This required new techniques for welding and other construction problems to satisfy these exacting requirements.

Q. These barriers, as I understand it, then are full of small holes or openings through which these substances are driven or carried. What is the size of those openings? In other words, what size are we talking about?

A. To look at the barrier, it looks as if it is a solid piece of material. However, it is made up of billions [fol. 163] of small holes. It contains billions of holes smaller than one or two millionths of an inch.

Q. You are talking then about diameter of those holes?

A. That's right. By the time you get down to that size—

Q. Can you see those holes at all with the naked eye?

A. You can't see it, but if you take a ballpoint pen like that and touch one side of the material, you can see ink on the other side. So material does flow or a light enough fluid would flow through it or gas will diffuse through it, but you can't see the holes with the naked eye.

Q. In connection with this operation of the gaseous diffusion plant, what about the use of railroads and trackage and so on, or what do we have there?

A. On the western end of the Oak Ridge area, which is where the gaseous diffusion plant is located, service is provided by the Southern Railroad to the edge of our plant.

area, and we have approximately 23 miles of Government owned trackage which is used to bring the railroad cars from the Southern Railroad siding into the various points of use in the diffusion plant.

This particular operation is now being handled for us by Union Carbide under this same management contract, although at one time it was handled for us by a separate [fol. 164] contract with the Southern Railroad.

Q. During the period we are talking about in this lawsuit, how was it handled?

A. At that time it was being handled by Union Carbide under the same operating contract.

Q. What type of material or what does the Atomic Energy Commission receive over the trackage or ship out over that trackage? What is its use?

A. The types of material are quite varied. We bring in a tremendous amount of coal for use in our electric generating station. We bring in substantial amounts of hydrofluoric acid and other chemical compounds. We bring in substantial amounts of equipment parts which are worked on and assembled at the K-25 plant.

We ship out—

Q. Stop there a minute. Is any part of that material owned, the material that is shipped in there owned by anyone except the United States Government?

A. It is all owned by the United States Atomic Energy Commission.

Q. Go ahead with your outbound shipments.

A. The outbound shipments are mostly the assembled equipment for use at our other gaseous diffusion plants.

Q. And it is, of course, Government owned property?

A. It is owned by the Atomic Energy Commission, and [fol. 165] some of it is used in the Paducah plant which is operated for the Commission by Carbide, and some is used in the gaseous diffusion plant near Portsmouth, Ohio, that is operated for the Commission by the Goodyear Atomic Corporation.

Q. The locomotives used in that transportation on these lines, these rail lines, are Government owned?

A. The switch engines are Government owned, yes.

Q. Of course, the cars are commercial cars placed by the railroad?

A. That is correct.

Q. Leaving now the gaseous diffusion plant and going to the Y-12 plant, do you have here a photograph showing the Y-12 plant, as it existed during the period material to this litigation?

A. Yes, this is a picture of the Y-12 plant area.

Q. Will you pass it to the court reporter and let her mark it Exhibit C-11.

(Exhibit C-11 was filed.)

Q. Can you tell us about what the area of this Y-12 plant is or was at the time material to this litigation?

A. The total plant area contains approximately 500 acres.

Q. On your Exhibit No. 1, it also appears in a shaded area, I believe, marked Y-12, does it not?

A. That is correct, near the center of the map.

[fol. 166] Q. Will you describe generally without going into detail, as to each of them—we may call for one or two of them—what are these buildings shown on Exhibit C-11.

A. The large buildings shown on Exhibit C-11 were constructed during the war for use in separating the isotopes of uranium by the electromagnetic process. Since the end of the war, the buildings have been converted to other uses.

Q. Are you not using or were you not during 1955 to '57 the electric process you referred to?

A. The electromagnetic production operation was discontinued as such in 1947. However, we continued to use a very small part of the separation process for separating the stable isotopes for research purposes.

Q. And was a portion of this area shown on Exhibit C-11 so used during the period of this litigation?

A. That is correct.

Q. I understood from your answer that that would be a minor or smaller use of it. What about the major portion of this property? What use was it put to during the period we are interested in?

A. The major part of the property during that period was being used for processing the product of the diffusion plants for further use in the Commission's defense program, and for the production of other special materials, also for the defense program.

[fol. 167] Some of the buildings shown on the picture, however, by 1955 to '57 had been converted to use in the heavy reactor engineering part of the Oak Ridge National Laboratory program. One of the buildings had been converted to a major machine shop for serving the entire Y-12 plant.

Q. Was the major machine shop which is included in this area of photograph C-11 operated by Carbide under its contract?

A. That is correct.

Q. What about this heavy reactor portion?

A. The heavy reactor engineering work is also operated for the Commission by Union Carbide under the same management contract.

However, it is programmatically assigned to the Oak Ridge National Laboratory rather than to the plant that manages the production facilities in the Y-12 area.

Q. And this major machinery shop that is included here—for what purpose is that shop used? Or was during this period?

A. That shop is used to fabricate the specialized equipment needed for certain parts of our production operation that cannot be fabricated within the time or within the specification limitations by outside industry and is also used for fabricating specialized equipment used in our processing improvement and development programs, [fol. 168] our research programs, and our pilot plant operations. It serves not only the requirements of this plant but also specialized requirements of certain of our other plants. There are one or two major buildings in the Y-12 area that are off the edge of this photograph.

Q. Explain, please.

A. There are two large tile buildings off the left-hand edge of the photograph in which the biology research program of the Oak Ridge National Laboratory, including the Mammalian Genetics Program, are conducted.

The office building serving this area is also off the picture, and also one of our major fabricating buildings.

Q. Let's pass to the Oak Ridge National Laboratory, and I show you a photograph which I believe is the Oak Ridge National Laboratory.

A. That is correct.

Q. Before questioning, let's file it as Exhibit C-12.

(Exhibit No. C-12 was filed.)

Q. The name Oak Ridge National Laboratory is the name applied by the Atomic Energy Commission to this installation shown in this picture, is it not?

A. This installation shown in the photograph is the primary headquarters of the Oak Ridge National Laboratory.

However, as I mentioned a moment ago, the Oak Ridge [fol. 169] National Laboratory is also responsible for some programs which are physically located in the Y-12 area and at several miscellaneous areas on the Oak Ridge installation.

Q. We all understand, but, Mr. Sapirie, what I was really getting at, this picture shows what we generally designate or what the Commission generally designates as the Oak Ridge National Laboratory, although it does have some facilities outside of this area?

A. That is correct.

Q. It is shown, I believe, and when I say "it," I mean the Oak Ridge National Laboratory, also shown on this Exhibit No. 1?

A. That is correct.

Q. As a shaded area near the south central part thereof?

A. That is correct.

Q. Describe briefly what is shown in this photograph and its use.

A. This photograph shows the various research and development facilities in use at the Oak Ridge National Laboratory. Starting on the left side of the picture, the quonset hut type buildings there are buildings in which are housed the health physics division and the metallurgy division.

Immediately above the quonset huts you see two large stacks. These stacks serve the reactor facilities, including [fol. 170] the graphite pile which was constructed during the war as the pilot plant for the reactors later constructed at Hanford, Washington.

The building immediately in front of the graphite pile is a hot cell building in which work is done on process development of highly radioactive materials.

The brick building and auxiliary buildings surrounding

the third large stack from the left-hand edge of the picture are the buildings used in our radioisotope production area. In these particular buildings the radioisotopes are separated and prepared for shipment throughout the world. This is a program amounting to some two and a half million dollars per year for the years under consideration.

In back of the radioisotope area there are two large buildings. The nearest of those two buildings is the isotope development facility, and the building in back of it is the principal laboratory and headquarters facility of the Oak Ridge National Laboratory.

In the picture immediately beyond the headquarters building is the high voltage laboratory in which are located the various Van de Graaff accelerators.

Q. What are they?

A. They are high voltage accelerators in which various atomic particles, such as protons, are accelerated to extremely high velocities and bombarded upon other atomic [fol. 171] particles to change their characteristics. This is a part of the basic research program at the laboratory.

The buildings in the foreground are mostly temporary wartime buildings which had not yet been replaced, except the building on the right central part of the picture, which is a new steam plant that was completed about 1950 and provides heating steam for the entire site.

Q. About how many acres are in this site, if you can tell us? If you can't, okay.

A. I don't know that I have that figure, sir. It is spread out all over the Oak Ridge area. This particular site probably has about 200 acres in it, but I am not too sure.

Q. You have referred to various buildings shown on this photograph as being used for different functions. Who operates these buildings and under whose immediate directions are these functions performed?

A. The Union Carbide Corporation operates these facilities for the Commission as our management contractor. They, however, perform programmatic services in accordance with the specific approval or direction of the Commission. And the work that is done here is work that is related to problems of the Commission, not only at Oak Ridge but at many other Commission installations.

Q. These are performed under this same contract we have been referring to?

[fol. 172] A. That is correct.

Q. Take in research and so on. These employees are Carbide employees in these other functions?

A. These are Carbide employees. I might mention one minor exception to that. We do have arrangements with industry and with certain foreign governments under which the Atomic Energy Commission provides assistance in training qualified technical people in the specific techniques used in the atomic energy program.

Many of those individuals are assigned to the Oak Ridge National Laboratory for that type of training, and they are not employees of Union Carbide under this contract.

Q. Of course, various types of materials are used in the functions performed at this Oak Ridge National Laboratory by Carbide employees. Are those materials the materials of the Atomic Energy Commission?

A. They are all owned by the Atomic Energy Commission.

Q. What about the machinery and the equipment and so on that are in these various buildings?

A. All of the facilities, all of the machinery, all of the equipment and tools are owned by the Atomic Energy Commission.

Q. When some piece of this equipment is changed or a new piece replaces an old, what about that?

[fol. 173] A. Well, it depends upon the reason for the replacement. Some of the equipment is disposed of because it has been used in the pilot plant operation and has served its purpose. In serving its purpose, however, it may have become highly contaminated with radioactivity in which case the equipment is buried in a burial ground which we have on the Oak Ridge area.

Other equipment which may have become excess to the needs of the laboratory but still has useful life can be disposed of by either transfer to some other AEC installation, some other Government agency, or by public sales.

We conform to the disposal regulations of the Federal Government, including the circulation of the Department of Health, Education and Welfare, for the disposal of certain types of surplus materials and supplies that may be

of value to the school programs and other programs of interest to government.

Q. Who determines the method of disposal? AEC or Carbide?

A. The general policy is dictated by the Atomic Energy Commission, and to a large extent it is consistent with the normal Government regulations. However, specific disposal procedures in detail are developed by the operating contractor and submitted to the AEC for approval before being placed in use, and thereafter any changes of those [fol. 174] procedures are also submitted to the Commission for approval before being implemented.

Q. Suppose AEC doesn't approve a suggested plan, what happens?

A. If the AEC does not approve a suggested plan, we normally try to propose some alternate plan that will accomplish the purpose without having the same objection to the Commission, and we return our broad suggestions back to the contractor with a request for the development of an alternate specific plan consistent with the suggested changes.

Q. Now as I recall, about 1955 the Federal Government was interested in a research and experimentation program that was carried on in Europe or was shown in Europe or Geneva.

Was any portion of this property used in that connection in which the work was done by Carbide under its contract?

A. Yes, we actually used Carbide under this contract in a number of ways to do certain jobs that were assigned to Oak Ridge operations. One specific job that may be of interest is the procurement of—first of all, the design, the procurement of parts, and the assembly of a pool type reactor for shipment to Geneva for reassembly at that point and for operation during the Atoms for Peace Conference.

Carbide under its contract did most of the work for the [fol. 175] Commission.

Q. When was that?

A. That was in 1955, spring of '55. However, the AEC provided assistance to Carbide in many respects, such as arranging for the air shipment of the parts and making the contacts with the international group in charge of the exhibits to provide for coordination of the part being done by

Carbide with the part being done by other AEC groups to assemble a coordinated complete US exhibit at Geneva.

Q. Was the work that Carbide did in that respect performed under this contract?

A. It was performed under the same contract.

Q. And paid for in the same way out of this fund?

A. That is correct.

Q. Was there any extra compensation to Carbide for that kind of work?

A. There was no extra fee paid to Carbide. The actual costs, of course, were paid for by the Commission.

Q. Under the same financial plan that you have referred to before?

A. That is correct.

Q. Something was said, some place in this testimony today and I don't know where, about what you would call a tower shielding or tower shielding facilities. Would you mind describing that for us briefly, not too long.

[fol. 176] A. If you look on Exhibit C-1, the map of the Oak Ridge area, in the lower left-hand corner you will see a point marked TSF. That is the tower shield facility. It is unique as it is the only facility of this kind in the United States and, so far as we know of, the only one like it in the world. It is made up of four structural steel towers approximately 324 feet high with cables suspended between the towers in such a manner as to permit us to raise a nuclear reactor into the air and at the same time to raise into the air to about the same elevation, of approximately 200 feet, a shielded container in order to determine the effects of the shielding material in resisting radiation from the reactor without having the scattering effect that you would normally get if this type of experiment was run on the ground.

We do work in this tower shield facility not only for our program at Oak Ridge but also for programs of the Commission at Lockland, Ohio, and Hartford, Connecticut, and certain other installations.

Q. Is that operation handled by Carbide under its contract?

A. That is part of the program assigned to Carbide under its management contract.

Q. And personnel on the payroll of Carbide are the personnel that handle that?

A. That is correct.

[fol. 177] (A recess was had.)

Q. Mr. Sapirie, in connection with either the Oak Ridge National Laboratory or any other of the installations that are at Oak Ridge and in which Carbide is or was during the period material to this lawsuit involved, is there a training program of any kind, and, if so, explain it briefly to us.

A. Yes, there have been a number of training programs. During the period in consideration here we were operating the Oak Ridge School of Reactor Technology at the Oak Ridge National Laboratory. This was a school on which an average of 80 people per school year were assigned for specialized training in reactor design and reactor operation.

These people were from many agencies of government and many industrial groups. And they were in training at a postgraduate level. In other words, they were all technically qualified in order to be accepted for the course. And they were trained principally with use of a staff of qualified people on Carbide's payroll.

Q. What direction and control did you exercise, I mean the Atomic Energy Commission exercise over that, either the picking of the students that were in those training programs or the courses that were given, and so on?

A. The Atomic Energy Commission controlled the level of the activity and the types and amount of training provided: [fol. 178]

The Commission also established the fees to be charged for the training, and the Commission personnel participated in a board of review of all applicants in order to select the ones who were considered qualified or best qualified and best suited to this type of training.

Q. You have referred a number of times to the Portsmouth operation and others located away from Oak Ridge itself.

What types of functions are performed at Oak Ridge with reference to equipment or machinery or anything else used at the Portsmouth plant?

A. The Portsmouth plant is an integral part of our U-235 production complex, just as if it was located in the middle of the Oak Ridge gaseous diffusion plant, except that instead of having pipelines to connect it with the other segments of the Oak Ridge gaseous diffusion plant, we transport the material, the process material by trucks so that it performs a certain part of the overall process operation.

In addition, however, the activities are coordinated by the Commission to insure optimization of our overall programs, of process improvement and development. Part of the process development work is done at Oak Ridge at the gaseous diffusion plant, and part is done at Portsmouth at the gaseous diffusion plant there.

The AEC staff controls the type and amount of work [fol. 179] done at each of the two locations to insure that there is no unnecessary duplication, and further to insure that the problems of highest priority are given proper consideration.

The result of that development program, however, regardless of which plant does the work, is immediately made available to all diffusion plants concerned, all three of the Oak Ridge Operations diffusion plants.

In addition, there is an interchange of equipment between the plants. For example, at the Oak Ridge gaseous diffusion plant, we produce part of the equipment that is used at all three of the gaseous diffusion plants, including the one operated by Goodyear at Portsmouth, Ohio.

Q. What about the personnel that operate the Goodyear plant, I mean the Atomic Energy plant which is operated by the management contractor Goodyear? What did you have to do with or what did Carbide have to do with training that personnel for that operation?

A. I might start out by saying that there are no companies in the country who are experienced in gaseous diffusion plants who are not contractors of the Atomic Energy Commission. Consequently when we were faced with a need for recruiting a new operating contractor for the Portsmouth gaseous diffusion plant at the time it was being built, we were forced to consider firms who did not have the precise experience we needed but which had certain types of experience that approach certain char-

[fol. 180] acteristics of the requirements for operating gaseous diffusion plants.

These industries include the rubber industry and the chemical industry and the automotive industry and the heavy equipment industry, paint and glass, and so forth.

We selected the contractor that appeared to offer us the strongest specific organization to do the job. However, the people provided in this organization, although they were experienced in the parent company's particular operation, had no experience in gaseous diffusion plant operation.

Therefore, we had key employees of Goodyear assigned to the Carbide plants at both Oak Ridge and Paducah for specific training in gaseous diffusion plant operation.

We also encouraged Goodyear to set up specific operating manuals patterned to a large extent after those used by Carbide at Oak Ridge.

Q. After these people were trained at Oak Ridge, they then went to the Goodyear operation or the Atomic Energy Commission operation operated by Goodyear?

A. That is correct. They went there to take over the operations, but at the time of start-up of the Portsmouth plant, we had representatives of the Carbide AEC contract operation stationed temporarily at Portsmouth to assist Goodyear in the safe and efficient start-up of the new plant there.

[fol. 181] Q. Mr. Sapirie, do other governmental agencies outside of the Atomic Energy Commission utilize employees of Carbide from the Oak Ridge Operations? In other words, they request AEC to furnish employees and do you furnish them, trained ones to assist?

A. Are you referring to other AEC contractors?

Q. I am referring to either AEC contractors or other Federal agencies.

A. Yes. To a much greater extent, however, with reference to other AEC activities.

The research and development organization at the Oak Ridge National Laboratory was assigned the responsibility of pilot plant testing of the new chemical processes being used at Savannah River, and now being used both at Savannah River and Hanford.

We are also asked from time to time to make technical and scientific people who are employees of Carbide avail-

able to assist other AEC locations on problems in which our people have a greater amount of experience.

We also use the Carbide group at the Oak Ridge National Laboratory to design, procure components, and fabricate the material testing reactor which was later installed by a construction contractor at the reactor test station in Idaho.

Q. That work or the work in connection with that matter, [fol. 182] which work was done at Oak Ridge, was done by employees of Carbide?

A. That is correct.

Q. That brings up another thing. What about the telephone set-up at Oak Ridge? What can you tell us about that?

A. During the war the entire Oak Ridge telephone system was installed and operated by the Signal Corps. However, immediately following the war, the Southern Bell Telephone Company took over the primary non-AEC-official telephone operations, such as those serving business and residential establishments in the city of Oak Ridge.

However, the AEC official phone for a short time after the war was handled by a group of AEC employees, including telephone operators and sound engineers.

However, at the time of the period in question here—

Q. '55 to '57.

A. '55 to '57, the telephone operation related to the official telephone service, and by official I mean the telephone service serving all of the AEC and AEC contractor activities in Oak Ridge, was assigned to Union Carbide under this contract, and they are now continuing that.

They have the telephone operators on their official switchboard, and they control the service under our specific [fol. 183] rection. They make surveys of toll calls and provide the information to us, sometimes with recommendations that we add a leased line between a site such as Oak Ridge and Washington.

We will review it, and if we feel that the recommendation is sound, we will add that line. If we disagree with them, however, we would not.

Q. Is there any specific compensation provided for that operation of telephone service, or is it just simply one of

the items that goes under the contract and which is paid for out of this Government fund?

A. It is just a single item out of their overall program, and at the time it was added there was no specific fee added for undertaking that activity.

Q. Something has been said I think today about nuclear materials that are sold or leased. What connection has the operations at Oak Ridge, AEC Operations at Oak Ridge, to do with such selling or leasing, and what is the relationship of Union Carbide to that operation and function?

A. Most of the source and special nuclear materials that are made available to private industry and to foreign countries comes from within the Oak Ridge Operations complex, and to a major extent from the Oak Ridge location.

The arrangements for the sale or lease of these materials are handled completely by AEC personnel. However, the [fol. 184] withdrawal of the material from a production process equipment and the packaging of those materials for shipment and the actual shipment are handled for the Commission by Union Carbide under this contract. They do it, however, under AEC direction.

Q. Before I get down more to the AEC direction on that, is Oak Ridge, Tennessee, the principal source of those materials more than the other plants or other field offices of AEC that are shipped to foreign nations and so on?

A. I would say that Oak Ridge Operations has the principal responsible for this. Part of the shipments though come from our refinery sites at Weldon Spring, Missouri, and Fernald, Ohio. That is what we call source material which is the normal uranium and its compounds. The special nuclear material, including the enriched uranium, however, is shipped principally from Oak Ridge.

Q. Of course, these source materials that are shipped from other points, Union Carbide has nothing to do with?

A. That's correct.

Q. But the enriched materials that come from Oak Ridge, Tennessee, they do handle the packaging and shipping and so forth, as you said?

A. That is correct. Carbide also handles for us the shipment of byproduct materials which are the special radio-isotopes that result from our processing following the

reactor operations. These materials are sold by Carbide [fol. 185] for the account of the Commission under a pricing schedule provided by the Commission and in accordance with various procedures and directions established by the Commission.

Q. You said they are sold by Carbide under your direction in accordance with procedures established by the Commission. Where is the money derived from the sale of those isotopes used or in what form does it come?

A. That money goes into the Government fund account of Carbide under this contract, and it is used to offset other operating costs under the contract in lieu of advancing additional funds.

Q. In other words, to the extent that money comes from those sales, you lessen the amount of money that you advance to Carbide?

A. That is correct.

Q. You spoke about a number of forms and so on that were used. I want to hand you here a group of sheets which I will designate as 12 pages, and I will ask you to file this as collective Exhibit C-13.

(Exhibit No. C-13 was filed.)

Q. Will you take these papers which you now hold in your hand, 12 sheets of them, and will you explain them briefly to us, please.

A. These are the invoice forms which have been approved [fol. 186] by the Commission for use by Union Carbide acting for the Atomic Energy Commission on the sale of the source and special nuclear materials.

Q. Before you go further, were these forms or are these copies rather of forms that were in use during the period involved in this litigation?

A. That is correct.

Q. Go ahead with it.

A. You might note that the first form asks that the check be made payable to the Union Carbide Nuclear Company Government Fund Account No. 1.

The following forms—the second form is the invoice that Carbide issues to the person or company receiving the materials. And it includes not only the basic charge for the material but also any special fabrication or handling

charges and a deposit on the Government owned container that is used in shipping the material.

Q. I note that on this page 2 you are now talking about there is language similar to that quoted by you with reference to page 1 in directing how payment shall be made, how checks shall be payable.

A. That's right. That also instructs that the checks be made payable to Union Carbide Nuclear Company Government Fund Account No. 1.

Q. Turn to page 3 of this exhibit.

[fol. 187] A. Page 3 is the source material order form which is prepared and approved by the Atomic Energy Commission and is given to the Carbide company for filling. These are forms used by other Federal agencies in ordering materials, and they are approved by the Commission before being filled by Carbide.

The following sheet—

Q. Before you pass to the following sheet, I notice that near the top of this sheet there are a number of X's, in other words, in the second line and third line perhaps showing that something has been stricken out. Do you know what that was?

A. No, sir, I don't.

Q. I notice also that this form is dated November 15, 1957, in the upper right-hand corner which is subsequent to the period involved in this litigation.

Was the same type of form in use at the time involved in this litigation?

A. A similar form was used following the passage of the Atomic Energy Act of 1954, which does cover the period of litigation.

Q. Go to page 4, please.

A. Page 4 lists the terms and conditions that applied to the transfer of the source material to other Federal agencies. And these terms and conditions are those established [fol. 188] by the Commission in accordance with the Atomic Energy Act of 1954.

Q. Now to whom is this paper delivered or what use is made of this particular paper?

A. That particular sheet is a part of the business transaction between the Atomic Energy Commission and the other Federal agency.

Q. In other words, is it not attached to or a part of what has been sheet No. 3 that we used here, that we just gave you?

A. That is a part of the order form used by the other Federal agency.

Q. I see sheet No. 5. Go ahead and explain it to us. I didn't understand, sir.

A. You were asking about the words that were X-ed out. I see sheet No. 5—

Q. That is I was talking about sheet 3. Now you are talking about sheet 5.

A. Yes. Sheet 5 does disclose the words that were X-ed out on sheet 3.

Q. In other words, this sheet is used by all persons other than Federal agencies, while sheet 3 was used by Federal agencies?

A. That is right.

Q. The sheet 6 which is headed Terms and Conditions [fol. 189] again.

A. That would be the —

Q. There are two pages of this.

A. Two pages there, that's right. Which lists the terms and conditions attached to the source material order form for other than Federal agencies.

Q. There are four or five other sheets attached as part of this exhibit which set forth terms and conditions, and generally I assume what you have testified about on the first sheets are applicable to this?

A. There is one significant difference, and that is that the remaining sheets applied to the special nuclear material, whereas the sheets we have looked at previously apply only to source material. Consequently they require a significantly different set of terms and conditions.

But in both cases they are developed by the Atomic Energy Commission to be consistent with the Act.

Q. You mentioned a while ago something about the sale or disposition that was made at Oak Ridge and through Carbide of byproduct materials.

I now hand you four sheets here and ask you if these particular sheets do deal or concern themselves with the disposition of byproduct material?

A. That is correct.

Q. Before you testify about them, will you pass them to [fol. 190] the court reporter and let them be marked as Exhibit C-14.

(Exhibit No. C-14 was filed.)

Q. I notice that the first sheet has indicated thereon that it is "For use by Federal agencies only," and that there is attached thereto a second sheet marked Terms and Conditions, while what would be the third sheet recites that it is to be used by all persons other than Federal agencies ordering the byproduct material. Is that correct.

A. That is correct. And related terms and conditions following each of the order blanks applies specifically to the purchaser involved.

Q. You testified earlier today that in general construction work on the area at Oak Ridge, Tennessee, was performed under construction contracts, but that there were times when some construction work was done by Carbide under your instruction and direction, I believe.

A. Sir, that is not quite correct. We sometimes direct Carbide to have construction work performed by subcontractors.

Q. By subcontractors?

A. They do not perform any construction work with their own forces.

Q. That is, with Carbide's own force?

A. That is correct.

Q. But you do authorize them to let a subcontract or let [fol. 191] a contract to another contractor?

A. That is right.

Q. An independent contractor?

A. That is correct.

Q. In connection with that, you issue directives, do you not, for such work?

A. That is correct.

Q. I show you here a group of forms which I want to identify as having 53 sheets, and I want to ask you briefly what these consist of.

A. These forms summarize the policies and control procedures for the design and construction program both of the Atomic Energy Commission and of the Oak Ridge Operations Office of the Atomic Energy Commission.

Q. Hand those to the court reporter, please, and let them be marked as collective Exhibit No. C-15.

(Exhibit No. C-15 was filed.)

Q. You have referred to a manual in answering this question. Explain it, will you, please.

A. Well, the policies and procedures of the Atomic Energy Commission are summarized in a manual that is issued by sections and parts of sections from time to time by the Washington Headquarters. These Washington issuances are supplemented by manual issuances by the various operations offices, such as the Oak Ridge Operations Office, to provide more specific guidance for our management type [fol. 192] contractors and our own employees on our specific operations.

Q. There are some sections of the manual, or both of these manuals rather, the general one issued by AEC and the specific one issued by the Oak Ridge Operations, included in this exhibit?

A. That is correct.

Q. In connection with this special construction work that you authorize or AEC authorizes Carbide to contract for, do you issue a special instruction to Union Carbide for each of those particular jobs that are done?

A. We issue a specific directive to Carbide for the performance of all construction jobs over a specific amount of money. Carbide in turn issues subdirectives for smaller jobs within approved programs, and these subdirectives are made available to the Oak Ridge Operations Office for review following issuance, but do not require prior approval.

At the time of the period 1955 to 1957, the amount above which these formal construction directives from the Commission were required, the limiting amount was \$20,000.

Q. Do you have before you now a directive for certain construction work?

A. I have in front of me a photostatic copy of a directive that was issued to the Union Carbide Nuclear Company for the installation of an additional boiler for the steam plant [fol. 193] at the Oak Ridge National Laboratory.

Q. The date of this directive, please?

A. August 30, 1955.

Q. Consists of how many pages?

A. Consisting of three pages.

Q. Will you hand it to the reporter and let her mark it as Exhibit C-16.

(Exhibit No. C-16 was filed.)

A. It might be noted that this directive is made up of two sections, one part of which authorizes the Union Carbide Nuclear Company to proceed with certain work and the second part authorizes the Director of the Area Construction Division, who is an AEC employee, to do certain other parts of the job.

Q. In other words, section 1, as it appears on page 2 of this exhibit, is to Union Carbide; section 2, as it appears on page 2, is to the AEC Director of Construction itself?

A. That is correct.

Q. Were similar directives issued from time to time for various other items of construction which were handled in this same manner?

A. Yes, sir.

Q. Was that true of every item of construction where the amount exceeded \$2,000 during this period of time?

A. A directive or a subdirective was issued for all items [fol. 194] in excess of \$2,000. The formal directives were issued for those items costing over \$20,000.

Q. In construction and engineering projects in which Carbide was involved, was Carbide free to follow its own policies and standards, or did they follow at all times policies and standards adopted and specified by the Atomic Energy Commission?

A. The design of facilities, even though performed by Carbide or a Carbide subcontractor, complied fully with the policies of the Atomic Energy Commission, on numerous different phases, such as austerity of design, safety requirements, compliance with the Southern Building Code, and many other specific criteria established by the Commission for the construction of Government facilities, within the Oak Ridge area.

Q. You have referred just above in your testimony to subcontracts that were awarded by Union Carbide under the direction and authority given to them by Atomic Energy Commission, and I show you here a group of papers con-

sisting of 20 sheets, and ask you if that is an illustrative subcontract for construction work, the type of which you have been referring to?

A. Yes, this is a typical construction subcontract.

Q. Is that entered into in accordance with the rules, regulations, and directives concerning which you have heretofore testified?

A. That is correct.

Q. And this you say is typical of others that were awarded during this period of time?

A. That is correct.

Q. Will you file this collective group of 20 pages as collective Complainants' Exhibit No. 17.

(Exhibit No. C-17 was filed.)

Q. I notice on the last page of this instrument though signed by Union Carbide Nuclear Company through its purchasing agent, it contains an approval on behalf of the United States Atomic Energy Commission.

Was that the customary and adopted plan that was followed in connection with these subcontracts?

A. Yes. All subcontracts must have the specific approval of the Atomic Energy Commission representative.

Q. So that this is typical of the construction subcontract used by Union Carbide during the period material to this litigation?

A. That is correct.

Q. How close did the AEC engineering staff work with Carbide's engineering staff and the subcontractors in carrying out any construction work during this period?

A. We worked extremely closely together. The normal procedure is for the Carbide engineers to do a certain [fol. 196] amount of conceptual design, after which the results of their efforts are reviewed with the AEC engineering representatives; and following which, if approved or if modifications are suggested and incorporated, the jobs are then made available for detailed design normally by some architect engineer firm under the direction of the Atomic Energy Commission.

However, the Atomic Energy Commission normally will use some Carbide employees to assist us in reviewing the results of the architect engineer's efforts in order to make

sure that the results of the design work will produce facilities that satisfy the use requirements of the operating contractor who is managing our facilities.

There are normally certain items that can be incorporated in such plans without additional costs that will accommodate the facilities to the operating organization's requirements, and we try to be considerate of the operating contractor to see that this is done.

After the plans are completed by the architect engineer, we also call on the operating contractor's engineering organization to review the detailed plans and specifications to provide guidance to us on any changes that should be incorporated prior to inviting bids for the construction of the facilities.

Q. I take it the amount of these subcontracts and the number of directives you gave for the doing of this subcontract work varied from month to month and time to time so that there was not a constant over amount of work going on with reference to subcontractors?

A. That is correct.

Q. Was any difference made in a month to month, week to week compensation to Carbide when the amount of this work varied?

A. No, there is no difference made. I might indicate one exception to that rule, and that is prior to the period in question when we had a major expansion program going on, we did assign to Carbide certain specific activities related to the design and procurement of specialized process equipment for the new plants being built not only at Oak Ridge but also at the Paducah and Portsmouth locations. And we did add to the contract a one-time fee for each of those major items of work.

Q. With that exception, however, the fee remained constant?

A. That's right. For our normal operating program, regardless of the amount of design construction work handled through the Carbide contract, we do not modify the fee.

Q. Does the H. K. Ferguson Company under its contract—and I am not going into details of it—do some construction work within the plant areas themselves?

A. Yes, they do.

[fol. 198] Q. They are a management type contractor as well as Carbide is?

A. They are a management type contractor under a separate AEC contract.

Q. Which is a construction contract, of course?

A. That is correct.

Q. Does AEC control and supervise that in its details as you do Carbide's contract?

A. We handle the H. K. Ferguson contract in a similar manner to the handling of the Carbide contract.

Q. That is as far as I want to go.

(A recess was had.)

Q. Mr. Sapirie, you have testified with reference to research projects that are carried on at Oak Ridge by Carbide. Is Carbide free to institute any research project it may desire to institute or to carry on indefinitely any research project once started without consultation with and approval by the Atomic Energy Commission?

A. Well, no, sir. The research and development program at the Oak Ridge National Laboratory is a segment of the Atomic Energy Commission's entire research and development program and is closely coordinated and meshed into the national program.

The work assigned to the laboratory and the manner in which it is handled is controlled specifically by the Com-[fol. 199] mission through use of a form, what we call Form 189, and continuing day-to-day contacts between our technical people and the technical people at the Oak Ridge National Laboratory.

Q. I show you three pages here which are marked at the top thereof "AEC 189" and ask you if that is the form to which you are making reference?

A. This is the form, yes, sir.

Q. Will you hand that to the reporter and let it be marked as Exhibit C-18, please.

(Exhibit No. C-18 was filed.)

Q. Briefly explain this form and how it is used.

A. This form is used to identify a specific research project that is assigned to and being carried on by Union Car-

bide Nuclear Company at the Oak Ridge National Laboratory.

The project is described and is identified with reference to other related projects of a similar nature also within the Atomic Energy Commission program. It is submitted annually and shows the accomplishment of the previous year and the results expected during the current fiscal year and programs to be considered during the future year.

Q. This seems to indicate, Mr. Sapirie, that the particular project covered by this particular form had been instituted in 1954, and that this is the request for the continuation throughout fiscal year 1956 and 1957 or what you would [fol. 200] call fiscal year '57.

A. Fiscal year '57, that is correct.

Q. This particular project had been in progress since July, '54?

A. That is correct.

Q. Then each year until the completion of the project you had to submit a new form for that particular project?

A. That is correct. However, in each submission we do try to identify the estimated cost for three fiscal years. In this particular case the costs were shown on the third page, for fiscal year '56 it shows the previous fiscal year, the fiscal year '57 which was the then current fiscal year, and fiscal year '58 which was the future fiscal year.

Q. So that for this particular project, what you really are asking for or what they are asking for is the allocation of \$82,000?

A. For fiscal year '57, that is correct.

Q. How many of these are to be submitted at the beginning of each fiscal year? About how many?

A. It changes from time to time. At the present time there are about 200 of them from Oak Ridge National Laboratory alone, and they cover the various different programs assigned to the laboratory, part of which are the responsibility of one programmatic division in Washington and part the responsibility of other program divisions.

[fol. 201] Q. When you get these requests just at the beginning, or usually at the beginning or just immediately prior to the beginning of a fiscal year, what does AEC do with them?

A. The Atomic Energy Commission analyzes the Form 189 to make sure that the program is consistent with the Commission and all programmatic objectives and that the results of the work during previous years justifies continuation, and that the program identified for the future years is consistent with the work of the same type being done by the Commission at other Commission laboratories.

Q. Now does the Commission always okay these, or what happens to them before work can be commenced on these projects by Carbide?

A. These forms are submitted in support of a specific fiscal appropriation request or budget request. And during the budget cycle, the appropriations are secured from Congress for either all or part of what was requested.

Following the appropriation of funds, the program divisions of AEC at Washington split up the funds received between operations offices for certain specific programmatic assignments.

The operations offices in turn will issue a financial plan to the specific installation, and in that financial plan we will provide funds for the projects that have been approved. Those that have been disapproved will not be funded.

[fol. 202] Q. Having approved the funds or maybe a portion of the funds for this particular project of which Exhibit No. C-18 is a type or is a specimen, do you do anything further—when I say “you,” I mean AEC—with reference to this project as it goes through, or do you turn Carbide over full and unlimited control of it?

A. We have a technical staff in the Operations Office organization that follows the program of the various projects assigned to the Oak Ridge National Laboratory. And the various program divisions in Washington have technical staffs that follow the work of the different operations offices to make sure that the work done at each location fits the requirements of the Commission on a national basis. But our technical people do work very closely with the technical people at the laboratory.

They review their programmatic reports, and they discuss with them various problems and results developed under these different projects.

The amount of AEC direction differs with different

types of work. Now some of the work assigned to the Oak Ridge National Laboratory is intended to satisfy specific Commission problems at other locations. In those cases the Commission's direction is more specific and more detailed. Part of the program at the Oak Ridge National Laboratory is what one might call basic research, and in these cases there is more latitude given to the individual [fol. 203] research man.

Mr. Kramer: I believe I will say that's all on direct examination. I want to say Mr. Sapirie has testified in quite general terms to certain matters on which we will put in some more detail by Mr. Vanden Bulck who will be the witness on tomorrow morning.

I give you that information so that if you get down to particular details in reference to certain of these things, it may be that you can get it better from Mr. Vanden Bulck, but I don't mean to limit your examination.

Mr. Rice: I will bear that in mind. I don't want to prolong it unnecessarily and unduly burden Mr. Sapirie.

Cross-Examination.

By Mr. Rice:

Q. Mr. Sapirie, you have testified on direct examination that you are an employee of the Atomic Energy Commission.

A. That is correct.

Q. You are not connected with Union Carbide, the complainant in this cause, in any way?

A. I am not connected with Union Carbide in any way except that I have the responsibility for administering the AEC contract with Union Carbide.

Q. All your responsibility is to the Atomic Energy Commission?

[fol. 204] A. That is correct.

Q. Mr. Sapirie, with regard to the work which is performed up here you have testified at considerable length about that. Who supervises the actual details of the work being carried on, let's say, for example, the work being done at a given piece of machinery or equipment by employees, minor employees of Carbide? Does Carbide super-

wise that, or does the AEC or some of its employees supervise that?

A. The detailed operation would be supervised by the employee of Carbide.

Q. The employees of Carbide in the Oak Ridge area, are they hired by Carbide?

A. They are hired by Carbide, yes.

Q. Does the Atomic Energy Commission have anything to do with hiring?

A. Yes, we have responsibility for approving the procedures that are used by Carbide in their employment practices. We have responsibility for approving their basic organization, and their basic salary schedules.

We have an Appendix A to the contract which covers the various employment conditions. At any time there is a need for a change in those, we issue a modification of that Appendix A.

Q. Does Carbide procure its own employees?

A. Yes. There are one or two minor exceptions, such as [fol. 205] the one I mentioned this morning, where the Atomic Energy Commission asks Carbide to accept a qualified technical representative of either a foreign government or some other industrial firm to work within the Carbide organization. But to the extent that they employ people on their own payroll, they select the people.

Q. If it becomes necessary to discharge any employee, is that done by Carbide?

A. That is done by Carbide.

Q. Who determines the pay that these employees receive?

A. It depends on the type of employee involved. The upper level exempt employees are paid on a salary schedule that is specifically approved by the Atomic Energy Commission. The hourly wage paid workers are paid in accordance with a labor contract with the union local representing the wage workers at the different plants, and there is a different union at each of the three plants.

Q. Is the entire area unionized, Mr. Sapirie?

A. The three plants operated by Carbide are unionized at the present time. However, in 1947 at the initial election of the bargaining group representatives, the Y-12 plant was not unionized. The Oak Ridge National Labora-

tory was unionized by the AFofL, and the gaseous diffusion plant was unionized at that time by CIO. So we have it all.

[fol. 206] Q. The union negotiations are carried on with Carbide?

A. The union negotiations are carried on with the Carbide key people at the specific plant.

Q. They do not negotiate with AEC?

A. They do not negotiate with the AEC.

Q. If it becomes necessary to take disciplinary action other than discharge against an employee, who is that done by—Carbide or AEC?

A. That is done by Carbide. I might mention one specific exception to this, and that is in the case of security matters. The Carbide employees must be cleared for the level of security information that they have access to. This clearance is called a "Q" clearance. It is granted by the Atomic Energy Commission after investigation of the employee or the prospective employee by either the Civil Service Commission or the Federal Bureau of Investigation.

These reports are made available to the Atomic Energy Commission, and our security staff check the reports of the investigating agents to make sure that there is no derogatory information within the reports. In the event there is derogatory information, then we have a formal procedure for handling a hearing in the case.

This hearing is an AEC hearing. And if, as a result of the hearing, the derogatory information is considered to [fol. 207] be significant, we would either deny clearance, or if clearance had already been issued, would withdraw the clearance, and Carbide must abide by the Commission's decision in these matters.

Q. That is matters relating to security, as you have stated there?

A. Yes.

Q. Mr. Sapirie, does the AEC or its employees have any right or authority to supervise the activities or to give orders respecting details of the operation of the minor employees of Carbide?

A. Let me say that as a matter of practice we do not issue orders to the individual Carbide employee, no more

than I would issue orders to the individual employee in one of our AEC area offices. We respect the organizational arrangement of our contractors and work through channels. In other words, if I have an order to give to Carbide, I will give it to the Carbide man in charge, and he in turn will implement that order within his organization.

If I have an order to give to our New Brunswick laboratory, which is handled entirely with AEC employees, I will issue that order to Dr. Rodden, who is our laboratory director, and he in turn would implement it.

Q. As a matter of practice, the Carbide employees take their orders from the superiors in their own organization? [fol. 208] A. That is correct.

Q. You testified, Mr. Sapirie, about the cost basis of source materials which are used up there. And I don't recall exactly what the figure was. It was something very high. How is that cost basis arrived at? Can you tell us a little bit about the mechanics of that? How do you determine what the values of this and that are?

A. The cost figure I mentioned was one that represented the cost that had been paid by the Commission for the original ore and for all subsequent steps of transportation and processing of that ore until it was in the form in which it was received by the Carbide production plant at Oak Ridge.

That particular number did include some processing done at other Oak Ridge Operations plants, such as the plant at Fernald, Ohio, and the plant at Paducah, Kentucky.

Q. Are you prepared to state for the record, Mr. Sapirie, how much Carbide has been paid for its work in conjunction with the Oak Ridge operation?

A. The total cost through the period in question?

Q. How much does the Carbide fixed fee amount to?

A. Since the start of operation?

Q. During the time involved in this controversy.

A. Would you like an order of magnitude number, or what you rather I get a specific number to insert in the record? It is on the order of \$2,500,000 a year. The precise amount changed from time to time as the scope of the [fol. 209] contract changed.

Mr. Heistand: It is in the contract documents.

By Mr. Rice:

Q. It is in the contract itself?

A. Yes.

Q. All right. You stated I believe roughly two and a half million a year?

A. That is correct, and that does not vary with any minor fluctuations in the work assigned to the contractor from time to time.

Q. With regard to the contract, I believe it was stated that Supplement 27 represented a rewrite of the original contract and all supplements up to 27.

I believe it was further stated that Supplement 37 represented a further rewrite of—

A. That is correct.

Q. —of previous contracts and supplements.

You stated on direct examination that this revision in Supplement 27, a rewrite, was undertaken so as to make the contract better reflect the working agreement between the agency and the contractor.

Just in what respects did it better reflect the working agreement?

A. Are you referring to the 27 or 37?

Q. I was referring to both.

[fol. 210] A. The rewrite in 37 is the one, I believe, that I referred to as better reflecting the relationship between the two parties.

Q. I may have been in error on that.

A. 27 was made principally to consolidate previous modifications into a single relatively simple document that one could use.

Q. And which did not effect large subsequent changes?

A. That's correct.

Q. But 37 did?

A. 37 was a complete rewrite to better reflect the relationship that had grown up between the Commission and the contractor through the years, and to reflect more specifically the management type arrangement with the contractor.

Q. Can you be a little bit more detailed about that, just what those changes were that undertook to accomplish this improved definition of the arrangement? What specific items were changed so as to bring that about?

A. Well, in this supplemental agreement the parties expressly identified the basic AEC principles underlying the use of management contractors, and included the following as the opening paragraph of Article I of the contract:

"The Government expressly engages a corporation to manage, operate, and maintain the plants and facilities described below and to perform the work and services described in this contract, including the utilization of information, material, funds, and other property of the Commission, the collection of revenues, and the acquisition, sale or other disposal of property for the Commission, subject to the limitations as hereinafter set forth. The corporation undertakes and promises to manage, operate, and maintain said plants and facilities and to perform said work and services under the terms and conditions herein provided and in accordance with such directions and instructions not inconsistent with this contract which the Commission may deem necessary or give to the corporation from time to time. In the absence of applicable directions and instructions from the Commission, the corporation will use its best judgment, skill, and care in all matters pertaining to the performance of this contract."

In adding this last and revising other language in a contractual document, AEC and Carbide intended to make clear the actual relationship of the parties under this contract as supplemented up to that time.

However, it did not change the manner in which we were operating. This is the same type of operation after signing of Supplement 37 as we had before Supplement 37.

Q. Was it about the time of this change that new purchase order forms were adopted by the Commission?

A. Yes, sir. By Carbide?

Q. Yes.

[fol. 212] A. Yes, sir.

Q. At the direction of the Commission, I would assume?

A. Well, the Carbide purchase order forms are approved by the Commission.

Q. And Carbide effected the changes in it pursuant to directive or instruction from the Commission. The idea of change was the Commission's and not Carbide's?

A. I can't say whose idea specifically it was. But the changing of the contract was something that, or of the purchase order form was something that we wanted and approved.

Q. What was your reason for wanting it, Mr. Sapirie?

A. We wanted the changed form to more precisely reflect the manner in which the company was doing business for the Commission with use of Commission funds and with the material being required being the property of the Commission.

Q. Specifically wasn't the change aimed at trying to get out from under state sales taxes?

A. I would like to say specifically the change was intended to more clearly reflect the intent of our use of Carbide as a management contractor to perform a part of our program.

Q. It was felt, was it not, that the purchase order forms in existence prior to this change did not afford the protection from state sales taxes that these changed purchase [fol. 213] orders perhaps would?

A. I believe our lawyers felt that the revised form was improved from that point of view. However, from the AEC management point of view, our purpose in changing the form was to reflect more precisely the conditions as they existed under which the Government funds were being used for the purchase of the materials and the property acquired was that of the Atomic Energy Commission.

Mr. Rice: All right, I believe we are clear on that.

Mr. Kramer: Before you leave that, I am going to call attention—I think the changed purchase order form went into effect in '54 or '55.

Mr. Heistand: '54.

Mr. Kramer: I think the contract rewrite was as of the date you have given, but I think you will find the proof will show the changed order forms was in 1954. I don't know whether that is material to the purpose you were driving at, but I thought I would give it to you before you left it.

By Mr. Rice:

Q. Mr. Sapirie, has it been the policy of the Atomic Energy Commission to allow the payment of state sales and use taxes by subcontractors operating on a lump sum basis within the area?

A. The fixed price contractors?

Q. Yes, sir.

[fol. 214] A. Yes.

Q. That is the lump sum contractors?

A. That's right. Those that are not in this category of management contractors.

Q. AEC has not resisted the payment off those taxes by those contractors?

A. That's correct.

Q. This construction subcontract that you testified was a typical contract here and was made Exhibit C-17, I note in glancing through that that there is a provision on page 12 thereof a section XLI relating to taxes, and that section obligates the subcontractor to notify the contractor, which is Carbide, in the event of demand or assertion by applicable taxing authorities, which includes the State of Tennessee, in its levy of the Tennessee retail sales tax, before paying the taxes, with respect to the property so purchased.

Mr. Kramer: I don't believe you got quite the right language, Mr. Rice.

Mr. Rice: I believe this relates to Government owned property alone. I did not notice it the first time I read it.

Mr. Kramer: That is correct.

By Mr. Rice:

Q. The Commission does resist taxes with respect to such property, I take it?

A. The Government owned property, yes, sir.

[fol. 215] Q. All right, sir. Mr. Sapirie, how would you define the discretion which is possessed by Carbide with respect to the operation of the plant up there? How would you circumscribe that discretion? What are the boundaries on it?

A. We expect them at all times to exercise their best judgment in the operation of the facilities entrusted to them within the operating objectives assigned to them, and in accordance with policies and procedures of the Commission which have been made known to them, and consistent with the financial plan assigned to them covering the specific operations involved.

Q. Mr. Sapirie, I would like to get into the record at this point, even though I realize it may come in later, some understanding of the character of the properties which have been acquired here by Carbide in the carrying out of this contract.

Now, you can correct me if I am wrong about it. I will state to you what my understanding of it is. You have first the construction materials that go into the buildings which are basically the same as those going into any building.

A. They buy only the specialized equipment which we specifically instruct them to acquire. They do not buy all construction materials.

Q. I mean common items like bricks and lumber and [fol. 216] cement. Who acquires those?

A. Those will be purchased by the construction concerns.

Q. Who would be a subcontractor?

A. Either a subcontractor or a prime contractor of the AEC. In most cases the construction work is handled by direct AEC prime contract. However, even in those cases we sometimes assign to that construction contractor process equipment which has been assembled by Carbide.

Q. The tax with respect to such materials is involved in this litigation though, isn't it? Carbide has an interest in that?

A. Carbide has an interest in the process equipment to the extent that they are performing certain specific services for the Commission as we direct the performance.

Q. That would be what I would call the second category of material here. That is, machinery and equipment which goes into these buildings, and I take it becomes more or less a permanent part of it, the way I think the buildings are designed for the purpose of accommodating perhaps a given type of machine or piece of equipment.

A. That is correct.

Q. And then we have ordinary maintenance items which is personalty entirely, tools, things of that character. Now they are acquired by Carbide, are they not? [fol. 217] A. Largely. We do acquire certain specific items but for the most part we look to the operating contractor to procure for our account the maintenance and operating supplies.

Q. Then we have another category that has been testified about to some extent here. There are manufactured in the Oak Ridge Operations various types of products. I don't think we need to get specific about that. But some of those are, I believe it has been stated, shipped out of state to other installations of the AEC; some are used in the operation at Oak Ridge.

A. That is correct.

Q. Now are there any other categories of materials that you can think of here that are involved in that Carbide acquires them and puts them to use in the consummation of its contract up there?

A. I think those are the major categories.

Q. Now the Atomic Energy Commission, too, I believe it has been stated, does on occasion turn over items of Government owned property to be used in various manners by Carbide and by the subcontractors?

A. That is correct.

Q. Is that a normal thing or is it exceptional when that is done?

A. That is a normal thing for certain types of equipment. [fol. 218] For example, all automotive equipment used by Carbide under this contract are procured by the Government agency that is responsible for procuring automotive equipment for the use of all Government agencies, including the AEC. And the automotive equipment used by our management type contractors is part of this same procurement of the Federal Government. We have the same type arrangements for other specialized equipment.

Q. If you have Government owned property which is available and which can be used for the purpose desired, you will use that rather than have the contractor go out and buy more?

A. That is correct.

Q. Mr. Sapirie, does Carbide ever acquire materials from

its normal sources of supply, commercial exchanges of supply, I mean, and turn them over to subcontractors to be used in the performance of work by subcontractors?

A. Yes, they do occasionally.

Q. What sort of materials?

A. I might give you an example. Prior to the steel strike, we anticipated some future delay in the procurement of steel needed for construction jobs that were not yet ready to be let. So we had Carbide purchase the steel under their contract and supply it as Government-furnished materials on the construction contracts.

[fol. 219] We also occasionally let them place orders for long delivery items of equipment that are to be used in the construction job which must be ordered prior to the time that the fixed price contract is entered into. And these will become Carbide-furnished in the case of a subcontract or Government-furnished in the case of an AEC prime contract, but in either event it is Government owned material.

Q. Is it sometimes possible that Carbide can obtain materials at a better price than a subcontractor could get them by reason of quantity purchase?

A. This is a possibility. There are not too many examples of that, but certainly a possibility. I was trying to think of a specific example.

Mr. Heistand: Was your question before that—I am not sure I got it right—were you asking whether Carbide got stuff from its own private plants and turned over to subcontractors?

Mr. Rice: No, I didn't have that in mind.

Mr. Heistand: Apply to commercial markets.

Mr. Rice: That I would take would include its own.

A. Let me clarify this point, if I might.

By Mr. Rice:

Q. All right.

A. In order to make sure that we are in an absolutely defensible position insofar as purchases by Carbide under [fol. 220] their AEC contract from other divisions of Carbide, we have a special procurement procedure whereby those purchases are made directly by the AEC, and the

materials are delivered to them. We would let Carbide invite the bids with our approval of the specifications as used, and let them abstract the bids that are received, but the actual determination to issue the order is made by the AEC, and it is a prime procurement activity of the Commission.

This is not true of all other operations offices activities. But we feel that this is one way in which we keep in an absolutely defensible position that other divisions of Carbide are not given preferred treatment. And Carbide desires it be done this way also.

Q. The record does not show that Carbide bought from itself.

A. That is the reason.

Mr. Rice: All right, I believe that's all.

Mr. Kramer: Nothing further.

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[fol. 221] (Whereupon, the taking of depositions was adjourned until March 31, 1960, at 9:15 a.m., when the following proceedings were had:)

CHARLES VANDEN BULCK, being first duly sworn, was examined and deposed as follows:

Direct examination.

By Mr. R. R. Kramer:

Q. Will you state your name for the record, please.

A. Charles Vanden Bulek.

Q. What is your place of residence, Mr. Vanden Bulck?

A. Oak Ridge, Tennessee.

Q. Are you employed by the Atomic Energy Commission at the Oak Ridge Operations?

A. Yes, I am.

Q. Will you state your history of employment down to and including your present position, please?

A. I have been employed by the Government since De-

ember, 1923. And until October, '42, I was with the Corps of Engineers as a civilian employee.

At that time I went into the Army, stayed in the Army until November, 1946, after which I reverted back to a civilian employee status with the Corps of Engineers until the Atomic Energy Commission took over on January 1, 1947. Since that time I have been with the Atomic Energy Commission.

Q. What is your background prior to going with the Government in 1923? What educational background?

A. I have a high school education, and a correspondence course in accounting and general business management. I have been employed by a bank and a sugar refining company prior to that time.

Q. After the war and since that time, in what capacity have you served with the Atomic Energy Commission? I guess we might start from January, '47, when the Atomic Energy Commission took over.

A. In January of '47, the man responsible for the field operations of the Commission was stationed in Oak Ridge, and I acted as an administrative assistant to him until the Atomic Energy Commission appointed a manager towards about September of '47.

I acted as an administrative assistant to the manager until February, '51, at which time I became Assistant Manager of the Operations Office. I stayed in that capacity until about September, '52, at which time I was assigned as Assistant Manager for Administration of the Oak Ridge Operations Office. I have been acting in that capacity ever since.

In that capacity I am responsible for the supervision and staff coordination of six staff divisions. They are Budget and Reports—

Q. Before you go into that, I would like you to take the exhibit we filed yesterday, which was the organizational [fol. 223] chart, and which was Exhibit C-7, which I believe you will recognize as an organizational chart which was in effect during the period involved in this litigation—that is 1955 to 1957—and show where you during that period of time fit into this program.

A. I appear as the Assistant Manager for Administration which is on the left-hand side of the chart.

Q. According to this chart, there are six divisions under you who report to you; is that correct?

A. That is correct.

Q. What is your contact directly, before we get down to these divisions, and was during that period of time, with Carbide?

A. In the organization of the Oak Ridge Operations Office, the manager, of course, is the No. 1 employee. He has a Deputy Manager who has the same authority he has and is the actual operating manager, you might say. An executive vice-president of a corporation would be a similar type of responsibility.

And then I follow as the No. 3 man in the order of succession in the organization, as the Assistant Manager for Administration. By that I mean to say in the absence of the Manager and the Deputy Manager, I become the acting manager.

The Manager, as a matter of good administration, has [fol. 224] limited the responsibility for the major administration of the Carbide contract to his office, that is, the Manager and the Deputy Manager and to myself. And three of us are clothed with the same authority with regard to the Carbide contract.

Q. Are instructions, what we call directives, issued from you? Were they during the period I am now talking about, to Carbide personnel?

A. Not to Carbide personnel.

Q. Explain, please.

A. Our contract is with the corporation, and their principal representative is Mr. Center, a vice-president of the company.

Q. Is that Mr. Clark E. Center?

A. Mr. Clark E. Center. Our directions or requests for any services are directed to him, since he is the responsible representative, and we can in no wise relieve him and bypass him in connection with that operation.

Q. In general, without yet getting specific, how does Atomic Energy Commission transmit these directives and instructions to Carbide?

A. It may take several forms. Some of them may be

in the form of letters, some a more informal nature. Others as a result of the day-to-day contacts that we have with top management.

[fol. 225] Q. You have mentioned the various divisions of the Atomic Energy Commission organization that report to and through you. Just what connection is there between Budget and Reports Division of Atomic Energy Commission; or through you as the head of that, to and with Carbide?

A. The requirements of the AEC manual—and this is a compilation of policies and instructional material issued by the Commission headquarters—usually over the signature of the General Manager of the Atomic Energy Commission.

Q. Who is stationed at Washington?

A. Who is stationed at Washington. They are addressed to the managers of operations. He issues instructions in all areas of our operations. These instructions are to the manager and the manager in turn delegates responsibilities to his staff to follow up on certain specialty phases of it.

The Budget and Reports Division takes care of the preparation of the budget of the Oak Ridge Operations Office. And in this connection it is necessary for them to prepare correspondence for signature of the Manager, which as I indicated before, may be signed by either the Manager, the Deputy Manager, or myself, which establishes the requirements that the contractor must meet in the preparation of any budgets. And this is true with regard to reporting practices.

[fol. 226] Q. Let me get at it this way, Mr. Vanden Bulck. The nature of the controls that Atomic Energy Commission exercises over Carbide may be divided into a number of sections. How would you list those sections?

A. Well, specifically I am responsible for the controls that originate in the operation of the Budget and Reports Division, the Finance Division, the Contracts Division which includes procurement, the Organization and Personnel Division which has responsibilities in the industrial personnel area, the Security Division which is responsible for the security program of the Commission, and the Supply

Division which basically is a property management function.

Each of these divisions are specialists in the areas of these instructions which are prepared by the General Manager in the form of the AEC manual issued to Oak Ridge.

The requirements of the manual are then reviewed by the staff and the Manager prepares what is called an Oak Ridge implementation of these instructions.

You must realize that the basic manual is a policy and procedural guide to the AEC Operations Offices, and it is done on a broad basis.

To effectively exercise the responsibilities that are delegated in this, the local manager must implement this and fit it in his staff pattern.

In turn the contract administrators are required then [fol. 227] to transmit instructions and directions based on these manual issuances to their contractors whose contracts they administer. And this is the manner in which these requirements get to the contractor.

Q. Let's pass from general policy requirements of the Commission in dealing with these contractors. Let's take up some of these divisions specifically so that we can see exactly what AEC does in the control of Carbide.

Take Finance and Budgeting. What about the general principles and the details of it, and what can you tell us about it?

A. The Finance and Budgeting are two separate fields the way they are treated in our office. Finance is responsible for the accounting of both the funds and property of the Commission, as a result of instructions issued by the General Manager to the Operations Office, the Oak Ridge Operations Office, and the Finance Division does the staff work, transmits to the contractor specific requirements as to how the business shall be accounted for.

This is in the nature of detailed instructions in the areas of uniform systems of accounts, accounting for assets of other nature, such as receipts from sales that the contractor engages in, cafeteria operations, and surplus property.

Q. Let me interrupt you and ask you to file as an exhibit [fol. 228] as Complainants' Exhibit C-19, this particular document you have before you now.

(Exhibit No. C-19 was filed.)

Q. What we have filed as Complainants' Exhibit 19 is a collective exhibit consisting of a large number of sheets of paper. Will you explain briefly what is contained in this exhibit? You can do it easier than we can dig it out.

A. This exhibit consists in its entirety of chapters and parts of the 1100 series of the AEC manual. This is entirely concerned with accounting principles, auditing principles, budgeting principles, specifications governing handling of insurance.

There are just a great number of instructions that are issued by the General Manager in all these fields with which the Oak Ridge Operations Office is required to comply, and which we in turn pass on to our contractors in the form of directions and requirements so that the net result will be a uniform system of accounts to permit the Commission to know what is going on in its facilities.

Q. You stated a moment ago that this type of information and instruction was passed on by the Oak Ridge Operations to contractors. Are you referring to what we have been calling in this record as management contractors or others?

A. This sort of instructional guidance is only necessary insofar as applied to integrated contractors, which I [fol. 229] think was defined yesterday.

The management contractors which operate the Commission's facilities are all bound by the requirements of these detailed instructions. That includes the contractor at Fernald, Ohio, at Portsmouth, Ohio, at Weldon Spring in St. Louis, Missouri, and at Paducah, Kentucky, and Oak Ridge, Tennessee.

Q. We have been using the word "management," or "manager contractor" rather than the word "integrated," maybe because integrated has given us headaches right now.

A. I think it might be well to point out that the terms "integrated" and "management" are practically synonymous.

The purpose of instructions to the contractors are to generate in the course of the operation by the management contractor a system of reporting that will permit us to assert the adequate financial and accounting control over all the assets and liabilities of the Commission.

Mr. Kramer: I want to make a statement for the record, and I ask opposing counsel to turn to what is designated at the bottom left-hand side of page 330.

There has been inserted at this portion, this page, bottom of page No. 330, three pages which are numbered at the lower left-hand corner, pages 330, 331, and 332, and it will be noted that what was page 333 and 334 and some succeeding pages have been removed.

[fol. 230] I want to state that these pages were removed because they contain certain confidential information that I did not realize when these exhibits were originally prepared. And I am going to have to ask you to return those pages you have in one copy at Nashville. You have the other copy here.

Mr. Rice: Yes, sir.

Mr. Kramer: Those were not supposed to be released to the public, and inadvertently I did so. However, pages 330, 331, and 332 do contain an outline of all that is contained in the pages which have been removed, but these pages do not contain the detail.

Mr. Rice: Where do we stop, Mr. Kramer? We start with page 333.

Mr. Jackson Kramer: 378, I believe.

Mr. Rice: 333 through 378, I will send it by registered mail.

By Mr. Kramer:

Q. The funds on which Carbide operates and did during this period are monies supplied by the Federal Government, are they not?

A. Yes. The contract requires that the contractor not use any of his funds in the operation of the facilities for the Commission.

The contractor provides us with an estimate of its requirements monthly, and each week—this estimate is [fol. 231] broken down into weekly requirements, and every week we transmit to him the funds he has indicated he needs, and we advance those to him. He then deposits those in the special bank accounts that he has established.

Q. Before we go into those bank accounts, Mr. Vanden Bulek, is there a paper or set of papers which constitute a financial plan which AEC issues to Carbide?

A. Yes, the entire program that the contractor is authorized to carry on in the Commission facilities is governed by the funds made available to him for that purpose.

The detail of the funds is contained in a very detailed financial plan which lists the dollars and limitations of cost of various programs, sub-programs, and activities that he is required to perform during the course of the period of the financial plan, which is usually one year.

Q. I want to show you a group of papers, the first of which is dated September 23, 1955, and which run through June, 1956. I think it consists of 13 sheets. And ask you to file that as collective Exhibit No. 20.

(Exhibit No. C-20 was filed.)

Q. The first of these papers, which consists of three sheets, dated September 23, 1955, and which purports to be a photostatic copy of a communication from Mr. Sapirie to Union Carbide, the attention of Mr. Center, what is the purpose of this instrument? And then go on through and explain these briefly so that we can shorten that, rather [fol. 232] than reading them.

A. This is a letter of transmittal of a financial plan. I think for the record I would like to clear up the fact that while this is dated September 23, 1955, it appears to be a financial plan for the entire fiscal year which starts July 1, 1955, and ends June 30, 1956. However, the reason for the delay, the later date of this letter—

Q. Let me interrupt you. The words or the letters FY appear throughout this. Does that mean financial year?

A. Fiscal year. The Government fiscal year is July 1st of one year through June 31st of the succeeding year.

Q. Go ahead.

A. The reason for what appears to be a later dating of the letter is due to the fact that Congress does not always appropriate funds through the Commission in sufficient time to permit issuance as of July 1st.

The reason for this, the Congress provides us with funds in each appropriation year which are called prefinancing funds, and actually take us for three years into the succeeding fiscal year.

I think we are probably the only agency of the Government that has this kind of an arrangement. But in order

to assure continuity of operations, Congress has done this. [fol. 233] Therefore, while this is dated September 23rd, it actually goes back and takes in that period of prefinancing plus the funds made available by Congress for the balance of the fiscal year.

The attachment which is not included here is a secret document because the detail of the programs and the amount of work to be done is in certain specific areas classified, and that is why it is not attached here.

Q. What, in general, without getting into specifics that we will stay out of, is included in the document that is omitted from this exhibit?

A. It is a detailed programming to the contractor telling him exactly what he may do during the course of the year in the area of the production operation—that is, the amount of money available for the operation of the gaseous diffusion plant, the amount of money available for the operation of the facility that fabricates and assembles weapon components, and for the detailed operation of the laboratory.

Q. Let me ask you to turn to a green page in the exhibit previously filed, 19, and it is headed "AEC Appendix 1325-181," and at the bottom there is a revision dated February 19, 1957, and ask you if that is a sample of what you are talking about.

A. Yes, sir, this is an exhibit to indicate—again issued as an instruction by the headquarters office to Oak Ridge Operations [fol. 234] indicating the type of information that we are required to include in the financial plan for the direction to the contractor as to how it should operate.

Now actually these are in broad program statements. They don't cut this down. But in our detailed direction to the contractor, we break down these various parts into a great deal more detail actually than appears thereon.

Q. I wish you would look at the succeeding page, the first page, and see if this isn't pretty near a complete example of the breakdown.

A. Yes, sir. Without identification of the actual detail of the program. As you will note on the page 3 of this green appendix, you have a series of numbers headed in the column "Budget and Reporting" classification. The 2 represents the 2000 program. 2000 program is the program

number that is assigned to all the production activities of the Atomic Energy Commission. That is the production of the uranium 235 and also plutonium at the other installations.

Then there are subdivisions under the 2000 program which govern the detail of the work to be done.

Q. If you follow on through with the remaining green pages, which are, as I understand, still illustrative of the form which is included as a part of what we have filed as Exhibit 20, which pages are omitted from that exhibit, is not the entire program rather fully set forth? I notice it is [fol. 235] even broken down according to the locations, the fifth page giving us Oak Ridge, and gives Paducah and so on.

A. Yes, sir. I might point out actually this financial plan is in two parts. One part of it deals right with the operating funds that are made available. The second portion of it, beginning with page 4, covers exclusively the construction funds that are assigned to the Atomic Energy Commission or appropriated for the Atomic Energy Commission and govern the amounts that will be expended for plant acquisition and construction during that period of time.

Q. This plan submitted to Carbide at or near the beginning of the fiscal year, as you have indicated, may be modified during the year, and, if so, how?

A. If at any time there are significant program changes or schedule changes which affect the funds, it is necessary that a financial plan change be issued in order to maintain our control over the funds.

This may result in either an increase or a decrease. If an increase, it is quite possible that the Manager of Oak Ridge Operations out of the total funds made available to him may have to adjust financial plans with other management contractors and make the funds available then in this manner. Or he may have to go to the headquarters office.

Of course, this becomes more simple if the additional work is something that is directed by the headquarters [fol. 236] office to be done.

Q. In this connection I want you to turn to the page of

that Exhibit C-20 which is numbered page 9 in the bottom left-hand corner.

I notice a reference to sub-program 9950, and which refers to revised allowances. It seems to indicate some change in equipment and so on. Will you explain that matter of change, sub-program 9950. Do you find it on page 9?

A. Is that C-27-9?

Q. It should be C-20. The numbering for the exhibits is not accurate.

A. Yes, sir. At the time for the period of this litigation, Congress appropriated funds for equipment not included in construction as part of the plant acquisition appropriation or the construction fund.

And in order to establish the proper control and not exceed the funds that Congress made available, it was necessary for us to prescribe specific allowances in this 9950 category, and that is what this covers.

This particular letter refers to the financial plan which is not attached in this particular instance again because of classification reasons.

But provides an increase in equipment to be purchased in the gaseous diffusion plant at K-25, and also covers the transfer of tube trailers which are used—

[fol. 237] Q. Just a moment. I want to come to that as a separate item.

I notice the last paragraph on the same page of this Exhibit 20, there is a reference to tube trailers. What are tube trailers?

A. These are trailers that we obtain for the purpose of shipping gas.

Q. They are automotive equipment?

A. It is automotive. It is the trailer itself without the tractor.

Q. Go ahead and explain it, and explain its use.

A. But it consists of a series of cylinders that are welded into a lot, and for gas that is needed in connection with the processing—in this particular case, it is probably helium gas that is used in the work performed by the management contractor. And we have to provide the equipment to bring it in from the source of the gas which is somewhere out in the Middle West.

Q. Who provides those tube trailers that are used?

A. The Atomic Energy Commission.

Q. They are owned by Atomic Energy Commission?

A. Yes, sir.

Q. And what use is made of them so far as Carbide is concerned?

A. They merely are used to transport the gas, and at the [fol. 238] point of destination the gas is then drained out of the tube trailer, tank trailer, into a receptacle which holds it there for use as needed.

Q. How is a transfer or disposition of one of these tube trailers—use an example—handled? Are they transferred from one project to another?

A. Yes. The Commission shifts its serviceable equipment around to where it is most needed, and any one of their installations use gases in varying degrees, and depending on the program requirements, why, it may be desirable to concentrate tube trailers at one spot or another.

The statement merely indicates that we have transferred through the current account, which is the AEC or Oak Ridge Operations controlling account, to Carbide the value of these trailers for purpose of inclusion as cost in their operation, for us.

Q. I want to call attention to another matter on here, on this exhibit. That is referred to on the succeeding page, the one we have been talking about. And while it is applicable to the Paducah operations under the Oak Ridge project, I think maybe it is illustrative. Will you explain it to us?

A. Yes, sir. The Carbide contract that is administered by Oak Ridge for the management of our facilities at Oak Ridge and at Paducah is a single document. We deal with [fol. 239] the Union Carbide representative, Mr. Center, in all phases of the operation, and in this particular case we would send a notice or letter to him if we had made any changes in the funds made available for operation at any one of the three Oak Ridge locations or at Paducah.

And the purpose of this is to make that type of adjustment.

Q. Let's pass on to what you started to talk about a while ago, and I interrupted you—the handling of the money which is advanced by the Atomic Energy Commission to

Carbide for the use in these operations. Explain how it is handled, please.

A. I believe I stated that Carbide submits estimates to us monthly, which includes a weekly scheduling of need for funds. The funds are advanced to them on this weekly schedule and when received by Carbide are deposited, in the case of Oak Ridge area operations, in three bank accounts in the Hamilton National Bank.

These three bank accounts are all identified as Union Carbide Nuclear Company, Division of Union Carbide Corporation, and for additional identification, such as Government Fund Account No. 1, No. 2, and No. 5.

The first one is the general fund account. The second, the No. 2 account is the payroll account. The No. 5 account is a custodial account in which they accumulate funds that [fol. 240] are deducted as a result of voluntary requests by the employees for the purchase of Government bonds.

Q. Let's take the No. 1 and No. 2 accounts which are identified as the Government Fund Account No. 1 and Government Fund Account No. 2.

When the money is paid over to Carbide by AEC, is it broken into two sums and identified for these two accounts, or how is it handled?

A. No, the funds are paid to Carbide in a single amount, and Carbide deposits it in the Account No. 1. The No. 2 account, the payroll account is merely one of convenience. They have in the neighborhood of 14,000 to 15,000 employees in the Oak Ridge area, and it complicates their bank reconciliation if all these checks are going through the general fund account and the payroll checks are going through the general fund account in addition to other checks they issue in payment of expenditures in the operation of it. This is for accounting convenience.

Q. The funds are withdrawn by Carbide from Government Account No. 1, Government Fund Account No. 1, and deposited in Government Fund Account No. 2?

A. That is correct.

Q. And No. 2 account is used for payroll?

A. Each payroll period they draw the total amount of funds in one check from Account No. 1 and transfer to Account No. 2.

Q. Is there any control exercised by the Atomic Energy

Commission with reference to the bank that is used for depository of these funds?

A. Yes.

Q. Explain briefly.

A. May I ask you this question, Mr. Kramer? Do you mean control on Carbide or control on the bank?

Q. No, I mean is there a control on Carbide as to which banks or what banks they may use as depositories for these Government funds?

A. Only insofar as the bank is able to qualify under the Treasury regulations as a depository for Government funds. Each one of our management contractors maintains the Government advanced accounts in banks that have qualified in accordance with the Treasury regulations.

Q. And those are the only banks in which those funds can be deposited?

A. Yes, sir. The requirement is actually that they must deposit with the Treasury in the form of collateral and in amount sufficient or equal to the largest bank balance in any one month.

Q. I show you here a group of papers consisting of five sheets, and ask you to file this as Exhibit C-21, the same being a collective exhibit.

[fol. 242] (Exhibit No. C-21 was filed.)

Q. The first page dated January 20, 1959, is merely informational communication from the Chief of the Deposits Branch of the Treasury Department. The other sheets of this exhibit show briefly what?

A. The first sheet is a letter from the Chief, Deposits Branch of the Treasury Department to the Finance Director of the Oak Ridge Operations Office, Mr. L. D. MacKay.

I believe I would like to point out what it says to the effect that the Hamilton National Bank in which Carbide maintains the Government fund accounts has been established as a general depository and has held such designation since February, 1933.

The subsequent letter attachment dated March 31, 1955, merely indicates a decrease in the amount of collateral on deposit with the Treasury Department to cover the Government funds deposited in the Hamilton National Bank account.

This varies from time to time as the fluctuation in the account occurs. And about that time we instituted the practice of making weekly advances to the contractor rather than the monthly advances, which accounts for the reduction on the funds.

Q. In addition now, Mr Vanden Bulek, to funds received by Carbide from the Government and deposited by it in these banks as you have outlined, does it receive any other [fol. 243] monies in connection with its operations under this contract?

A. Yes, it does.

Q. Explain briefly, please.

A. It receives monies from the operation of the plant cafeterias right within the plant areas at the three plants in Oak Ridge. It also receives—

Q. Wait just a moment. You mean the employees at these plants purchase food and so on at the cafeterias?

A. They do.

Q. And the income from those food sales are deposited?

A. They are deposited by Carbide in the Government fund account.

Q. Has it authority to deposit those funds anywhere else?

A. No.

Q. All these monies are deposited in this?

A. All income or revenue from any part of the operation is required by not only the terms of the contract but by Commission instructions to be deposited in the Government fund account.

Q. What other sources, if any, does it receive money from?

A. They sell radioactive isotopes, again at our direction, and do the billing function and collect these funds and put [fol. 244] them in the Government fund account.

They also have other sources such as when we authorize them to sell scrap or surplus property. They then sell this as agent of the United States and collect the funds and deposit them in a special bank account.

Q. There are other restaurants and cafeterias on the Oak Ridge area at Oak Ridge, Tennessee, in addition to these cafeterias that are within the plants that are operated by Carbide?

A. Yes, sir. The plants are located—the closest one to the town area is at the Y-12 plant, which is roughly about between two and three miles.

Q. Let's stop just a moment. What about funds that come from food sales at those cafeterias or restaurants?

A. These restaurants, these other restaurants should not be confused with the Carbide operation for the Commission. The other restaurants are actually individuals engaged in private business.

Q. And Carbide has no control over them, and does not handle those funds, and they would not be in any wise involved here?

A. None whatsoever.

Q. You spoke about the sale of certain materials just a moment ago, which sales were made by Carbide as agent of and for the United States. What type of materials are you referring to?

[fol. 245] A. Mainly scrap and obsolete equipment. As we make process improvements, this generates a certain amount of scrap material. It may be in the form of pipes or other parts of equipment which have no further value. And they are then collected and periodically Carbide advertises these for sale.

Q. You may not know—I don't know whether you do or not. If not, I will get it elsewhere. Do you know whether those sales are made to customers both within and out the state?

A. They are made both within and out the state.

Q. Is that Government owned property?

A. Yes, sir.

Q. Is any part of that to which you are referring owned by Carbide or title in Carbide?

A. No.

Q. What about products like isotopes? Are they sold, or any of them sold by Carbide as agent of or for the United States?

A. Yes. In order to obtain radioisotopes for use, whether in research or medical purposes or industrial purposes you must obtain an approved order from the Commission for these isotopes, which has as part of it you have qualified to properly handle them.

[fol. 246] The order is then transmitted to the Oak Ridge

National Laboratory which is the production center for isotopes for the Commission. And they fill this order and ship it out. And the customer in this case is required to pay, directed to pay to Carbide which clearly identified it for deposit in the Government bank account.

Q. We had an exhibit yesterday, I believe you were present and saw it filed, which provided for a listing of these sales and gave direction to the customer to make the payments.

A. This is right. This is the invoice prepared by Carbide and transmitted to the customer.

Q. So far as you can recall, are there any other type of receipts that Carbide has? We have named three now. One from the direct grants or payments, advances by the Government to Carbide. One for the sale of used equipment and machinery and so on. And a third from materials such as isotopes. Fourth, from the operation of the cafeterias within the plant areas themselves.

A. Yes, there is one other source of revenue that Carbide collects.

Q. Explain it, please.

A. And that is that occasionally because of the concentration of technical skills that we have at Oak Ridge, other operations offices and other contractors of these operations [fol. 247] offices doing work for the Commission require the services of Carbide personnel on the fabrication or assembly of a specific piece of equipment.

In that case it sometimes is possible that there is an actual exchange of cash for the services rendered. And whenever this occurs, the cash is then collected by Carbide and deposited in these special accounts. It is not always true that they collect cash, but it depends on which is the greater volume of paper work—to have adjustments in financial plans between the other operations offices and our operations office and then subsequently passing that on down to our management contractor; which is the least problem is the way we treat this.

Q. Is that always for loaned servants or loaned employees to other AEC installations or may it be to other governmental agencies or facilities?

A. The cash transfer arrangement I was referring to has to do primarily within the official AEC family. The minute

we ask Carbide or Carbide is required to perform a service for another agency, then the funds may be collected again in two ways. One, it may be a direct payment to Carbide by the other agency, in which case they would place it in the special government fund account; or it may be collected officially by the Atomic Energy Commission on a standard Government transfer voucher form which has been in use for years, and which they, the Commission, would accept [fol. 248] the cost for the service from Carbide, bill this cost to the other agency, and the collection would be made by the Commission.

Q. What records is Carbide required to keep of these financial transactions we have been talking about?

A. They are required to maintain records which are required by the accounting system which we have requested them to install.

Q. Is that accounting system set forth in exhibits already filed?

A. Yes, sir. It is to a great degree included therein. Again, the accounting system that Carbide has—that we have approved for their use is one which is modeled after the system that is included in the AEC manual, but again recognizing that this is a broad treatment of a problem, the system is then adjusted to reflect the particular organizational portions of the Carbide operation.

Q. Now what does AEC do with reference to the keeping of these records and the accessibility of them to you or inspection of them?

A. Actually the records are maintained by Carbide for the AEC. The relationship is sort of one from headquarters office to a branch office. The Carbide maintained records are actually the Atomic Energy Commission records, and we merely control the records by posting the totals—what they call a reciprocal accounting basis.

[fol. 249] The information is then collected by the Oak Ridge Operations Office from Carbide and from the other management contracts under Oak Ridge Operations, and then consolidated into a single report and transmitted to our headquarters office.

In turn the Commission in Washington consolidates all the operations offices reports and prepares a single report for the agency.

Q. So far as these physical reports—I mean the books, the papers, the records in which they are kept, whose reports are those? Carbide's or Atomic Energy Commission's?

A. They are all the Atomic Energy Commission's property. The management contractor is instructed to maintain this set of accounts exclusively for the Atomic Energy Commission. It has nothing to do with his private operations.

Q. The record yesterday disclosed that there are other types of contractors on the Oak Ridge area working for the Atomic Energy Commission, I mean types other than the management contractor. Are the same type of records required of these contracts?

A. No, sir.

Q. Take a cost plus or something.

A. These are cost contracts that we enter into for various purposes, primarily architect engineer services. And these [fol. 250] are not management contracts in the same sense that the Carbide is in the operation and management of our facilities.

Q. Very briefly what difference is there in the kind of records they must keep?

A. They keep their own records but the Atomic Energy Commission keeps its records in that case. It does not depend on the contractor's records and has no claim of ownership to the contractor's records, but it actually audits and establishes its own records on the basis of vouchers by which we reimburse the contractor as opposed to advancing him money.

Q. Getting back to now the Carbide records, accounting procedures, does AEC at any time give specific or particular direction with reference to any particular transaction?

A. Yes, we may specifically tell Carbide to treat in the accounting records a transaction in a certain manner. This may involve the question of whether charging, crediting prior year cost. It may involve the manner in which we treat the early obsolescence of a piece of equipment—any one of a number of things in which we may give them specific direction.

Q. I want to hand you a group of papers, being 22 in

number, and ask you to file this as collective Exhibit C-22.

[fol. 251] (Exhibit No. C-22 was filed.)

Q. Will you take just a few minutes and explain this exhibit and its significance.

A. These are a series of directions to Carbide, telling him how to treat certain specific items.

Q. What do you mean by treat certain specific items?

A. Well, take the first letter dated May 27, 1955. It replies to a Carbide request to establish a new target date for the submission of a monthly product cost report, which in effect is request to establish a date of one month plus five days after the close of the period.

This was considered by the Commission both at Oak Ridge and in the Headquarters Office. And it was our opinion at that time that the additional cost to get the report done in that period of time should not be incurred. In other words, they were shortening up the period of time for submission of the report, but in making the recommendation, they recognized that additional costs for overtime would be involved.

We reviewed this request and pointed out to them we did not feel that this cost should be incurred.

Q. In other words, before they could accrue that additional cost, it was necessary to get your approval?

A. Yes, sir.

Q. And this is an instance where approval was not [fol. 252] granted?

A. This is right. The request, of course, was predicated entirely upon Carbide's efforts to meet our deadline reporting dates which had previously been established.

Q. In order to get a little more definite on some of the letters contained in this exhibit and the purpose thereof, turn to page 3.

A. Yes, sir.

Q. In order to determine who should pay the freight charges, either Carbide or the Savannah and Hanford Operation or contractors, it was necessary for permission to be obtained from the Oak Ridge Operations Manager?

A. The question raised by Carbide in this case involved

the shipping for the account of the receiver of certain materials from the Oak Ridge Operations to the Savannah River Operations and the Hanford Operations contractors. We were sending them material.

The normal practice of the Commission is that the shipper bears the transportation cost. However, in this case Carbide felt that they would like to have the receiver bear these costs.

After a review by our office and check with the headquarters, we advised Carbide that they were to accumulate or accrue all the costs involved with the shipment of the containers and reflect those values in the value of the material shipped, rather than as a separate charge.

Q. In this exhibit we have just filed are a number of letters touching with accounting procedures for specific items or transactions.

Just what does AEC do, or did during this period of time, with reference to the approval of accounting procedures or changes in procedures or new and unusual procedures which arose?

A. Carbide was instructed to prepare an accounting procedure for its use in connection with the operations at Oak Ridge. This was then submitted to the Oak Ridge Operations Office, reviewed by the staff there, and if it met our requirements we would approve it. If it didn't we would have undoubtedly reviewed this with the interested parties and reached an agreement on the proper treatment, after which it would then be approved. Or we might even send it back and request that certain things be changed in it before it was put into effect.

Q. The ultimate control and method of handling it was determined by the Atomic Energy Commission?

A. This is correct, sir.

Q. Let's pass to the question of policies and procedures with reference to budgeting for or reporting costs.

I hand you another volume consisting apparently of a number of pages, many pages from the manual which you [fol. 254] testified about earlier, and this being both from the general manual, and from the manual at Oak Ridge or as developed at Oak Ridge, rather, and ask you to file this as Exhibit C-23.

(Exhibit No. C-23 was filed.)

Q. Briefly tell the Court what this is.

A. This is a collection of sheets of both the AEC manual and the Oak Ridge Operations Office implementation of that manual governing the formulation and preparation and execution of the budget.

Q. Generally I believe that the sheets from Oak Ridge Operations Office itself are in yellow and from the general office of the white pages, except wherein it has been necessary to reproduce something from the Oak Ridge office which may also then appear in a white sheet. Is what correct?

A. Yes, sir. The way to identify which is Oak Ridge origin versus Washington origin, the Washington sheets all are tabbed up on top "AEC" appendix or number or what-have-you. The Oak Ridge implementation all carries the letters "OR" with sub numbers following it.

Q. Go ahead. You started to explain this. Explain briefly.

A. This is the instruction by the General Manager through the Operations Manager as to how the budget will be prepared for the operations office and for the program [fol. 255] for which it has been assigned responsibility.

(A recess was had.)

Q. You have just identified this Exhibit C-23 as setting forth the policies and procedures of AEC with reference to the reporting of costs which are applicable to Carbide. What use do you make of these policies with reference to your Congressional appropriations?

A. Before answer that question, Mr. Kramer, I would like to add something to the statement I made before with regard to the accounting procedure that we had approved for Carbide. I believe I only got through that part of it that had to do with the original preparation and submission to the Oak Ridge Operations Office of the procedure.

I think I made it clear how we approved it, and then the company or Carbide put it into use in connection with the operations which they do for us. The fact of the matter is that Carbide cannot make a change in that procedure. If it desires a change for one reason or another, it submits this change to the Oak Ridge Operations Office where it is reviewed and it may be approved or it may not be approved.

In any event, unless it is approved, it is not put into effect. I wanted to be sure, for I did not get to answer that question.

Q: I think that is in the record.

A: I think I stated that with regard to the basic procedure [fol. 256] but not to any change. They cannot change it. I wanted to be sure you understand that.

Regarding the budget and reporting classification as set forth in this exhibit, the budget is prepared in about this manner: 18 month or more before the funds are going to be made available in the budget that we prepare, the various program divisions in our headquarters office submit to us a list of program or budget assumptions. This is an estimate or a projection of what is expected to be done in the budget to be passed on by the Congress 18 months hence.

The assumptions are submitted to each operations office for review by them in the area in which they have program responsibilities. The operations office then breaks this up and assigns—in Oak Ridge it assigns the portions to the various management contractors that it has operating its facilities.

The contractors review these, and Carbide is one of those, and submit to us their suggestions and recommendations as to the feasibility of achieving the goals under certain conditions, of carrying out the programs under certain requirements, and turn these back to the operations office.

Q: When you say contractor, are you referring alone to management contractors?

A: Yes, sir.

Q: The other contractors have nothing to do with this? [fol. 257] A: The other contractors that are not managing and operating Commission owned facilities have no responsibility in the preparation of budgets.

Q: All right, go ahead.

A: The assumptions are again reviewed after all the comments are in, and then a final set of assumptions are prepared and submitted to each operations office by the headquarters office. Again we go through the same procedure and we now send the final assumption to the the management contractor for a preparation of the budget, based on carrying out the program goals contained in the assumptions.

The contractor prepares this budget and submits it to the operations office. We review it as to the adequacy, as to whether the estimates are proper, as to whether they have got everything in there that we feel they need to put in there.

And we will sit down with them and review it and point out where we have decreased their estimate or presentation, and where we have increased it, or where we have accepted it. And this is then consolidated as an Oak Ridge budget for submission to our headquarters office.

The same procedure is again gone through in the headquarters office where they will actually—the program directors will actually visit Oak Ridge Operations and review with us each part of this budget as to adequacy and discuss [fol. 258] as to whether it will produce or perform the program goals.

Q. In that budget submitted by you to Washington and finally approved, is the item or are some of the items and its breakdown of the work that is to be performed by the management contractor Carbide identified separately?

A. Yes, because we have separate management contracts doing fairly separate and distinct parts of the work.

Q. What I want to get at, the management contractor—like Carbide or other management contractors—has a separate space in that budget where their particular work is identified?

A. Yes, sir. I believe I mentioned before when we looked at this exhibit, one of the pages in this Exhibit C-19, that I refer to the use of program numbers, so that for instance the 2000 program which covers the production of fissionable materials, since we have two management contractors engaged in this business—Goodyear Atomic Corporation at Portsmouth, and Carbide at Oak Ridge—the summary of the 2000 program in our budget submission is the efforts of these two contractors in that particular program field. And it is divided to show in each case what each one is expected to perform.

Q. When you say "we have two management contractors," you refer to under the jurisdiction of the Oak Ridge office?

A. Yes, sir. I merely made this reference with regard [fol. 259] to a particular program. Actually there are two

more management contractors in the production operation—one of them being Mallinckrodt Chemical Works at St. Louis, and the other the National Lead Company at Fer-pald, Ohio.

In addition to those two, we have other management type contracts for operating other program requirements in Oak Ridge. For instance, the Management Services, Inc., which operates the facilities in the community. At least they did during the period of this litigation.

There is also the Oak Ridge Institute of Nuclear Studies which is a management contractor and operates Commission facilities in the Oak Ridge area.

Q. What about some construction management contractors?

A. The Ferguson construction—

Q. H. K. Ferguson?

A. H. K. Ferguson Company does not submit a budget to us. The contract—

Q. Do not go into the details now because we are not talking about that case. But it is a management type contract?

A. It is a management type contract; yes, sir.

Q. The details of that we will take up. There are other type management contracts at Oak Ridge?

A. Yes. The University of Tennessee has a management contract. It does an extensive program of research.

The Oak Ridge Hospital, Inc., during the period of this litigation was a management contractor.

The American Industrial Transit Company, which operated the bus system within the Oak Ridge area, are also management contractors.

Q. The AIT or American Industrial Transit?

A. Yes, sir.

Q. And the hospital?

A. The Anderson County School Board was in effect a management contractor.

Q. Let's stay off of it for a moment. But these other two are going out of the picture now due to the taking over of the municipal functions?

A. Yes, sir. That part of the work that MSI—Management Services, Inc.—was doing, that involves the city

activities, will be taken over by the new corporate city of Oak Ridge.

Q. Is there a management contract with the Technical Information Service?

A. No, sir.

Q. Explain.

A. I believe Mr. Sapirie yesterday indicated that we had some 200-odd employees assigned at the Oak Ridge area which are AEC employees but not AEC employees directly [fol. 261] assigned to the Oak Ridge Operations Office. This is a group known as the Technical Information Service, which is located in Commission facilities at Oak Ridge and does the function of distributing technical information which is one of the requirements of the Commission of the Atomic Energy Act.

Q. In the planning of this budget, is the expense of that division and the money to be expended by each of these other management contractors included in your budget as submitted?

A. No, sir, we do not do any of the budgeting or projecting of needs for the Technical Information group. This is a direct responsibility of the AEC in headquarters office.

Q. What about these other Government contracts like University of Tennessee and so on? Is it included?

A. This is included in the Oak Ridge submission. This is part of the Oak Ridge responsibilities.

Q. And during the period we are now talking about, is the expense incident to the contract, management contract you had with the Anderson County Board of Education included?

A. Yes, sir.

Q. In other words, each of the management contract items was included as a part of the budget?

A. As a part of the Oak Ridge responsibility, yes, sir. [fol. 262]

Q. Briefly how is the execution of this budget carried into effect and what responsibility does Carbide have particularly—the whole thing generally, but particularize mainly on Carbide without too much detail?

A. After we went through the stages I described previously, in the preparation of the budget, in due course Congress appropriates funds. The appropriation to the Atomic Energy Commission is in two parts, one called

operating expense and the other called plant acquisition and construction. These sums may be in the amounts that the Atomic Energy Commission has originally submitted, or they may be adjusted by the Congress upward or downward, depending on the decision of that body.

The funds are made available to the Commission by the Bureau of the Budget, and each of the program divisions then are assigned their portion of it, and they in turn allocate this to the operations offices to whom they go for the accomplishment of their objectives.

The Oak Ridge Operations Office obtains its allotment of funds on an overall Oak Ridge Operations Office requirement. We then take these funds and split them up among our various management contractors, and prepare and give them a financial plan which specifically tells them what the funds are to be expended for, and the limitations imposed upon the various categories.

[fol. 263] Q. Now, of course, Congressional appropriations are made on an annual basis?

A. Yes, sir.

Q. Do you at the beginning of a fiscal year, or as soon as the appropriation is available therefor, pay over to Carbide the entire amount of money that has been approved in this budget and Congressional appropriation?

A. No, sir.

Q. For the entire year?

A. We merely amend the contract increasing the total funds available for obligation under that contract. The actual cash is not advanced to the contractor until such time as he has indicated a need therefor by these monthly estimates that he submits to us for cash advances.

Q. What do you do and what does AEC do, your office, with reference to seeing that Carbide stays within the various amounts allocated to different projects that it is carrying out under the contract?

A. We have established as a part of the budget operation a reporting operation which Carbide is required to observe, and they submit to us monthly reports broken down on the same type of reporting classifications as the budget classifications were originally established. So that it is very easy for us to determine what the status of a project that has been assigned to Carbide is at any one time by a review

[fol. 264] of the reports. We are able to determine, for instance, whether the rate of expenditure is fast or slow.

Q. Let me ask you there; You have earlier established—or Mr. Sapirie has, I have forgotten which—that money was advanced weekly, or maybe less frequently at times, from the Government monies to Carbide. Is that advance made on the reports you are now talking about, or is there some other basis by which you determine the amount of money that you will hand over, AEC will hand over or advance to Carbide from time to time?

A. No. The funds are not advanced on the basis of the monthly reports. These reports are generally submitted about twenty days after the close of the month, and obviously the expenditures will have been made before the costs are actually collected and put together into the various classifications and reported. So that the funds for the actual operation, the cash, is given to them on an entirely different estimate based on their experience or review of that experience over a period of time as to what the actual cash expenditures run monthly and weekly.

Q. Does Carbide—and I am speaking about the period involved in this litigation—ever overrun those estimates that you have advanced and you have to make another advance to it at an earlier date than you had anticipated?

A. It is quite possible that some unusually large expenditure may require to be made prior to their estimated time for such an expenditure. This depends entirely on the vagaries of the vendors shipping the material at a given point, and they may anticipate that something will come in, say, shortly after the first of the month, and it shows up before the end of the month, in which case they will need the cash to pay for it. In such a case, they come in with a supplemental request for additional funds.

Q. That would be where procurements are made for AEC by them?

A. This is correct. This is only involved in that type of a transaction because they can project their payroll fairly accurately, and they never run short because of it.

Q. To summarize this testimony, who exercises the responsibility for the formation or planning of the budget and the expenditure thereof insofar as Carbide is concerned in connection with the Oak Ridge Operations?

A. The sole responsibility is assigned by the Atomic Energy Act to the Atomic Energy Commission for getting the work done that is covered in broad terms in the Act.

Also, it is the Commission's responsibility to get the work performed for which the Congress allots funds or appropriates funds each year.

So that the management contractor is merely assisting us in getting our job done, and the responsibility as to [fol. 266] whether something is performed or not is the Commission's. We cannot delegate that responsibility to anyone else.

Q. You said earlier this morning that there was under your jurisdiction in your position with the Atomic Energy Commission some responsibility with reference to personnel employed by or that work under Carbide. Will you go into that for a brief explanation, please, sir.

A. Yes, sir. I exercise that responsibility through the assistance of the Organization and Personnel Division which is one of the areas that are my responsibility in the Oak Ridge Operations.

And in connection with its function, the personnel function as far as Carbide is concerned, on a day to day basis I maintain contact with what Carbide is doing. I have more than a passing knowledge of the policies and employee plans that are in effect under the Carbide contract. The requests for changes in these plans invariably go through me, and I indicate on them to our staff division what action should be taken, and this is subsequently transmitted to the contractor.

I might add further that the procedure requires that the management contractor submit to us for approval certain wage rates which he proposes to pay to key employees or exempt employees, and also non-exempt above a certain amount. These are submitted with a justification to the [fol. 267], Oak Ridge office, and after review and processing by the AEC office, they are acted upon and this may be either approval or denial or postponement for a period of time.

Q. We will come to more concrete examples on an exhibit. But I ask you if the general policies and criteria for employment of Oak Ridge employees by Carbide are set up by the Atomic Energy Commission?

A. Yes, sir. One of the manual chapters contains a general outline of the type of appendix that should be in effect in any management type contract. And we pattern our particular appendix after that to a considerable degree, recognizing that on the local area we may have to make changes.

Q. I want to give you a group of papers consisting of 26 sheets and ask you to file this as collective Exhibit C-24.

(Exhibit No. C-24 was filed.)

Q. I believe in this there are a number of copies or photostatic copies of quite a number of communications which passed between Carbide & Carbon—

A. Yes, sir.

Q. —and the Oak Ridge office of the Atomic Energy Commission, some of these communications on behalf of the Atomic Energy Commission having been signed by you, some by Mr. Wende, and some by Mr. Sapirie. [fol. 268]. By the way, who is Mr. Wende?

A. Mr. Wende is the Deputy Manager of Oak Ridge Operations.

Q. On the other hand, there are included a number of communications signed by Union Carbide Nuclear Company, some by Mr. Clark E. Center. Who is he?

A. He is the vice-president of the Union Carbide Nuclear Company and is the Union Carbide Company's representative at Oak Ridge.

Q. Some are signed by Mr. Oral Rinehart. Who is he?

A. Mr. Oral Rinehart is actually the general office manager, and he signs these communications in the absence of Mr. Center or Mr. Emler. Mr. Emler is superintendent of operations, and normally in Mr. Center's absence he would sign, but in the absence of both, Mr. Rinehart will sign.

Q. There are some specific ones signed by Mr. Herman M. Roth.

A. Roth, yes, sir.

Q. Who is he?

A. Dr. Roth is the Director of our Research and Medicine Division which is one of the technical divisions that looks after our technical programs in the research and development field at Oak Ridge. He is responsible for the administration of the Oak Ridge National Laboratory under this

Carbide contract. This is the day-to-day type of administration.

[fol. 269] Q. Now we were talking just before we filed this exhibit with reference to rates of pay; control of such things as that, so I want to go to that portion of this exhibit rather than the first pages that appear.

And I call your attention especially to page numbered at the bottom left-hand corner as page 11, dated June 13, 1956.

Will you explain that and what it indicates?

A. This is a submission by the management contractor to the Oak Ridge Operations Office requesting review and approval of salary increases either of a merit type or promotional type for a number of employees employed at the locations indicated therein.

Q. You mean that before these merit increases or promotional increases could be granted it was necessary for Carbide to submit the list for approval by Atomic Energy Commission?

A. Yes, sir. Not alone the list, but an actual detailed form which is manually approved either by the Deputy Manager or myself before it goes back to the contractor.

Q. I notice on this list in two pages, or page and a fraction, of date June 13th, and immediately following that is a letter addressed to Union Carbide by Mr. W. R. McCauley, Jr., on a photostatic copy of such letter.

Who is Mr. McCauley?

[fol. 270] A. Mr. McCauley is my deputy. He acts in my absence and has the same authority I do in my absence.

Q. In other words, the letter of July 3, 1956, grants approval for the promotional increases which was requested in the letter of June 13, 1956?

A. That's not quite correct, sir. The letter of July 3rd is merely a transmittal of the approved forms, the AEC 37 form, which I just mentioned before contains all the detail and justification for any proposed merit increase or promotion. This is merely a transmittal letter of the approved forms.

Q. But which had been approved by the AEC?

A. The forms had previously been approved before this letter was written by either Mr. Wende or myself, or the Deputy Manager or myself.

Q. I want to call attention to a letter found on page 15

of this exhibit dealing with extended work week. And I notice that in order to give an extended work week there is a request for approval.

Explain, please. That is, the request is made by Mr. Center from the Union Carbide.

A. The normal operation of the contractor is a 40 hour week. He has within his own discretion the right to incur some unscheduled overtime. There may be a plant emergency or some occurrence which requires some people to [fol. 271] stay beyond their normal eight hour day.

However, at any time that the program requires a definite scheduling of overtime for an extended period, then the request must be made to the Oak Ridge Operations Office with justification therefor, and after review it again may or may not be approved, depending entirely on what our evaluation of the request is.

Q. Now this request made in this letter of September 26, 1956, appears to have been approved by your office on the next page of this exhibit by communication dated October 11, 1956.

A. Yes, sir. If you will note, that the authorization is for a specific period. If the contractor feels that it is necessary to go beyond that period, he must again request authority to schedule the overtime.

Q. Are there any such occurrences where Carbide grants living allowance payments or compensation?

A. Yes, sir. As part of its personnel policies which are described in the Appendix A, when it is necessary for the contractor in connection with the work that is being performed for us, to temporarily station an employee at some point for the purpose of following some specific work or for inspection of work being fabricated, or to remain and stay on top of the job to make certain that it will be performed in the required time, then there is granted to them a living [fol. 272] allowance. When this period of time at one point goes beyond a certain time, then the contractor submits it to us for approval for an extended period.

Q. Is it necessary, in order for the cost of such item to be included in the monies expended by Carbide out of the Government funds, that approval be granted for such extension?

A. Yes, sir.

Q. Do you have here copies of a letter written to Mr. Sapir by Mr. Rinehart on page 19 of this exhibit and a reply by Mr. Woodruff? Is that typical of the method followed in such instances?

A. Yes, sir.

Q. This is not just one case, but it is typical of others that arise, other transactions?

A. This is in accordance with the conditions contained in Appendix A that require this type of submission and approval action by the Commission.

Q. This is not just one item out by itself but it does occur from time to time, does it not?

A. Yes, sir.

Q. There are other pages in this exhibit along the same line and we will not take time to go into them, but what if any control does AEC exercise over the type of fringe benefits that may be granted to Carbide employees?

[fol. 273] A. The terms of the contract provide that the company's employees engaged on the work—under the contract for the operation of our facilities at Oak Ridge—contains this provision: That the employees here at this location shall not be treated less favorably than the regular employees of the corporation engaged in their private work.

At the time the contract was first entered into, a list of these various fringe benefits or employee plans were submitted to the then Manhattan District who established and approved a list.

As time goes on, changes take place in industrial practices, and in each instance where the company in its private operations may adopt a new practice, before it can be made effective at Oak Ridge it must be submitted to the Commission at Oak Ridge for review and approval. If we do not approve it, it is not put into effect.

Q. Are any of the employees of Carbide at any time sent on foreign travel missions, and, if so, under what conditions?

A. Periodically the Commission is asked to participate in international exhibits, conferences, and it becomes necessary for us to request the participation of Carbide employees in these conferences because of the special scientific achievements or talents they possess.

At such time the company then requests of the Oak [fol. 274] Ridge Operations Office authority for the individual to travel to a foreign country and for the expenses thereof to be borne by the Commission.

Q. I wish you would turn to page 2 of this exhibit we are now discussing.

A. Yes, sir.

Q. And state whether or not that is illustrative of what you are talking about for a particular Carbide employee?

A. Yes, sir, this would be the type of letter that we would send to the management contractor after the request for travel had been approved.

Now actually in the Oak Ridge Operations Office we do not have authority to directly approve foreign travel. So all these requests are not alone reviewed by us, but are also submitted to our headquarters office, and the actual approval is given there.

Q. But they are for employees on the Carbide payroll?

A. Yes, sir.

Q. I call your attention to pages 8, 9, and 10 of the exhibit we are now discussing and which deals with one A. C. Upton. What type of transaction are we there dealing with? Page 9 seems to contain a detailed outline with reference to his employment, his clearance, his itinerary, and so on.

A. The first letter is a submission to the Oak Ridge [fol. 275] Operations Office by the Deputy Director of the Oak Ridge National Laboratory requesting that we give them a decision on a request for approval of foreign travel to an individual in the laboratory named Upton. He had received this invitation to attend one of these international congresses on radiobiology and to present a paper.

Enclosed with that letter was the detail of the foreign travel for which authority was requested. The upper portion of it involves information that we request in each instance in order that an individual going to a foreign country can be briefed by our security people as to the problem area so that he does not get involved in any situations, and also the type of information perhaps he ought to be looking out for.

The second part of it describes in detail the itinerary that he will follow in making the journey. In this particular

instance, it is a very simple one. He merely goes from Knoxville by plane to Mexico City, and when the conference is over, he comes back to Knoxville.

Q. Mr. Vanden Bulek, what type of control does the Atomic Energy Commission exercise over the employing policies of Carbide?

A. The policies for employment and/or the detailed procedures that Carbide has developed have, of course, all been reviewed and approved by the Oak Ridge Operations Office.

[fol. 276] They hire and fire, which is their responsibility as an employer. However, there are some instances involving key individuals where the company cannot move in or move out the employee without our prior approval. In other words, if there is someone at a very high level in the organization, such as a plant manager or his deputy that they would desire to move for one reason or another to the company's private operations, they cannot make this move unless we agree until they submit to us a suitable replacement which in our opinion can continue the work in the manner we want it done. And this is both incoming and outgoing in that caliber of person.

Q. Does the Atomic Energy Commission exercise any control over salaries paid by Carbide to management employees it has at Oak Ridge?

A. It does, in this way—that in the Appendix A, which is a part of each of these management contracts, there is included a schedule of ranges, rate ranges, of salary ranges within which the company must operate. They have latitude in the approval of salary increases or promotions when the amount is—in the period of this litigation, was under \$10,000 per year.

Q. You mean the increase was that much?

A. No, sir, the salary rate. At any time that the change in salary action involves a rate in excess of \$10,000, then the contractor, Carbide, submits to us the AEC 37 form, [fol. 277] which I referred to or testified to heretofore, and with sufficient information to justify the proposed action.

After our review it is, as I say, either approved or disapproved or we might ask that they defer action on it for a period of time pending a further evaluation.

Q. You stated earlier in your testimony that under

your division or the responsibility of your office of the Atomic Energy Commission you had something to do for Atomic Energy Commission in connection with procurements by and property management exercised over property by Carbide.

A. Yes, sir. There are two staff divisions that I am responsible for. One is the Contract Division, which takes care of all the procurement that the AEC is required to make. The other office, the Supply Division, handles among other things the property management responsibilities.

The procurement function is one that is performed by Carbide as the result of a procurement procedural manual which they have prepared at our request and have patterned it after the manual that the AEC has prescribed for its operations.

This procedural manual after its preparation was submitted to the Oak Ridge Operations Office and reviewed by it. And after considerable discussion and changes and so forth, it was finally issued in an approved form. The procurement of Carbide is guided by this manual. Again, there [fol. 278] are no changes made in this manual without them being submitted to the Oak Ridge Operations Office for prior review and approval.

Q. These policies that you have just referred to with reference to procurement practices are set forth in the manual to which you made reference, and I hand you another group of pages and ask you how this—which we will file as Exhibit No. C-25—fits in with the testimony you have just been giving?

(Exhibit No. C-25 was filed.)

A. This collection of pages is composed of parts of the AEC manual as issued by the General Manager at the headquarters office at Washington and of pages indicating the Oak Ridge implementation of these particular chapters issued to us for our guidance.

The first one is in the general administration series and governs the operation of printing plants.

The Atomic Energy Commission is required to obtain authority from the Joint Committee on Printing, which is a Congressional committee, for the establishment of any kind of a printing plant. This same requirement has been

extended to the management contractor at Oak Ridge, and in fact to any management contractor under the Oak Ridge Operations, or elsewhere in the Commission, that in order to establish a printing plant, it must make a request to the [fol. 279] local office, the operations office, who reviews it, endorses it or otherwise acts on it.

If it endorses this request, it must then submit it to the headquarters office of the Commission from where it is submitted to the Joint Committee on Printing, this Congressional committee I just described. Unless they approve this action, we have no authority to authorize or direct the contractor to maintain or operate a printing plant.

Q. The first portion of your exhibit deals with the printing plant. But taking it as a whole, does it set forth the procurement policies for all procurements?

A. Yes, sir. The balance of it is devoted entirely to the contracting procurement policy of the Commission.

Q. I believe there are some portions here that deal with property management, do they not?

A. This seems to deal in its entirety with procurement purchasing.

Q. I think that's right. Is there a different policy followed in procurements where the dollar value of the property to be procured is above certain limits?

A. Yes.. Insofar as the Carbide operation at Oak Ridge is concerned, all purchases of supplies and equipment in excess of an amount which is established by the Contracts Division, must be submitted to the Oak Ridge Operations Office for review and approval before it is effected.

[fol. 280] This number varies in contracts, depending upon the degree of confidence that we have in the ability of the contractor to do a good job in the procurement area.

Q. During the period involved in this litigation, what was that dollar value, if you recall, so far as Carbide is concerned?

A. Amount submitted to us for approval?

Q. Yes.

A. I have to check my note here.

Q. Let me clarify a little. I ask you in addition to dollar limitations in amount of purchase about which approval is required, specific approval by the Atomic Energy Commission, are there also certain types of procurements;

regardless of value, that require specific approval by the Atomic Energy Commission before they are made by Carbide?

A. Yes, any kind of a procurement by Carbide which is in the nature of a cost contract, whether it be a materials contract or cost contract or cost plus a fee contract, before it may be entered upon it must be submitted to the Oak Ridge Operations for our approval, regardless of amount.

Q. We have here a group of letters requesting, and some granting approval, for purchases of these special types of equipment, which will be Exhibit No. C-26.

(Exhibit No. C-26 was filed.)

Q. Are these various letters types of the kind that were [fol. 281] used in request for, and granting of, these special approvals?

A. Yes. The contractor would submit to us a request for approval, and after our review, we would write him a letter authorizing his entry into the types of contracts that he had requested—assuming that we approved it.

(Whereupon, at 12:05 o'clock p.m., a recess was had until 1:30 o'clock p.m., when the following proceedings were had:)

By Mr. Kramers:

Q. Mr. Vanden Bulek, shortly before we adjourned for lunch, you made reference to the fact that Carbide prepared and submitted to the Atomic Energy Commission a manual setting forth the practices and procedures which it wanted to follow in connection with certain portions of this work, and that such practices and procedures as set forth in that manual were approved by Atomic Energy Commission, perhaps after certain corrections and changes.

I now show you a volume here which I am asking you to file as Exhibit C-27, and which consists of some 345 pages.

(Exhibit No. C-27 was filed.)

Q. And now I ask you what this Exhibit C-27 is, or is it in line with your testimony this morning? And go ahead and make a brief explanation of it.

A. This is the procurement manual and procedure pre-

[fol. 282] pared by Carbide and submitted to us for review and approval.

Q. It seems, according to the date on the letter which is on the first page of this document, it was submitted to you under date of September 14, 1955.

A. That is correct. At that time the Carbide representative, Mr. Cénter, by letter submitted the manual with certain revisions which we had requested that he make.

Q. I believe the approval and reference to the changes is set forth on pages 3 and 4 thereof, which is in the shape of a communication from you representing Atomic Energy Commission to Union Carbide.

A. Pages 4 and 5.

Q. They are numbered, these pages bear the numbering at the lower left-hand corner of 31 and 32, but—

A. That's right.

Q. —as a matter of fact, they are pages 4 and 5 of this exhibit, are they not?

A. This is right.

Q. After this manual had been approved, was it found necessary to make changes in it, and, if so, why and under what conditions?

A. From time to time Carbide would recommend changes to us based entirely on their reorganization perhaps. But there were other instances where because of new requirements placed upon us through the manual that we then required Carbide to change its procedures likewise.

Q. After these procedures, whether established by your manual—I mean AEC manual, headquarters or local—or the procedures established by the manual of Carbide which you approved, and they had been in operation for some time, and they did not prove out to be a satisfactory method of administering some particular project, what would be done?

A. We would determine that through our constant participation with Carbide personnel in the procurement activity, and also through our periodic reviews and audits of their operation in any given field.

All the activities of the contractor are audited, whether they be in science, accounting, procuring, warehousing, or what-have-you. And the reports that would be prepared by the auditors would list compliance with the

manual perhaps but an indication that in actual practice the policy ought to be revised. And we would then review this and direct a change in the policy, or in the procedure.

It must be recognized that you cannot sit down and write a theoretical manual that will work in every instance, so what would look good on paper might not necessarily in actual practice work, and we would find this out by the periodic reviews and audits.

Q. I show you a group or number of papers which I am [fol. 284] asking you to file as collective Exhibit No. 28.

(Exhibit No. C-28 was filed.)

Q. Will you explain what Exhibit No. 28, this group of papers, shows. Let's start with the yellow sheets there at the back and which are headed under "OR-9X06."

A. OR-9X06 is an Oak Ridge chapter in the AEC manual which prescribes the standard subcontract and contract to purchase order forms.

Q. This came from the local or the Oak Ridge office.

A. Yes, sir.

Q. Go ahead.

A. This was prepared to obtain uniformity in the forms used by various Oak Ridge Operations management contractors, and it was done to make certain that all of the documents used by our management contractors reflected the same standard terms and conditions.

Q. Was a copy of this issued to Carbide?

A. Yes, for their information, but we actually prescribed and requested or directed Carbide to use the standard conditions and the subcontract form.

Q. In the remainder of this exhibit are a number of letters, some of which are addressed to the Atomic Energy Commission by representatives of Carbide, some of which are addressed by Carbide to other individuals. Do these show the procedure followed when it was found necessary [fol. 285] to deviate from the exact form set forth in the latter part of this exhibit or the manual?

A. The letter from Carbide indicates the manner in which the company observed our requirements with regard to approvals of any changes in either the contract terms or conditions that we had prescribed.

They might desire, or indicate that something need be

changed. And they would then submit it to us and we would review it and determine whether the change was desirable. And it would not be put into effect until after we had approved it. I believe this letter of August 15, 1956, clearly establishes this.

Q. Are these typical of instances where there was a request for deviation of the standard procedure or where request was made and not granted or where request was made and granted for deviation?

A. Yes, sir, they are typical of our action with regard to these requests.

Q. Can you tell us the approximate percentage of the procurements by Carbide that were made which required prior specific approval by AEC?

A. During the period in litigation, it amounted to approximately 36 per cent of the procurement actions originated by Carbide which were submitted to the AEC for prior approval.

[fol. 286] Q. Are you talking about 36 per cent in dollar value rather than volume?

A. Yes, sir, I am.

Q. Why, briefly, did it require prior approval of AEC before Carbide made these procurements?

A. Under the terms of the contract language, all procurements in excess of \$100,000 must be submitted to the Commission for prior approval. And that, of course, does not apply to those instances where prior approval which I testified to this morning in the nature of cost subcontracts or time and material orders. There is no dollar amount on those. All of them have to be approved. But otherwise the \$100,000 limitation is the dividing line at which they must come to us for approval.

Q. And you are referring now to procurements during the period involved in this litigation?

A. Yes, sir.

Q. In the Atomic Energy Commission set-up working under you or that portion of it working under you, you have a Contracts Division, do you not?

A. Yes.

Q. What does that Contracts Division do, and what did it do during the period involved in litigation with reference to procurements by Carbide?

A. All procurements that required the AEC approval [fol. 287] were submitted to that division, and the director of the division was authorized to approve all those Carbide purchase orders in excess of \$100,000 but less than \$500,000. If they were over \$500,000, they would then be submitted to me or to the Deputy Manager for approval.

Q. Just a moment. You said all of them were approved. Do you mean that everyone that Carbide would submit within those limits were approved, or what just actually did happen?

A. No, the Contracts Division—and in the event it was submitted for my approval, or Mr. Wende's approval, we would review the particular procurement, and if we were satisfied that it was properly handled, then we would approve it. There have been instances where we have refused to approve them and have turned them back to the contractor for re-advertising under conditions which would warrant more equitable competition.

Q. What type of materials or machinery or equipment, or whatever it may have been, are we talking about when we are talking about these procurements?

A. We are talking about things such as heat exchangers which are necessary in the gaseous diffusion operation, which represent a great number of units at a fairly substantial individual cost. And when they are purchased, the vendor must necessarily tool up and get ready to produce them on quite a long term basis, because he must recover [fol. 288] and amortize his tooling in the cost of the units. So that in order to get an equitable price, we get a long term contract.

At the time that Carbide goes out to the field for bids, when they come in, we review them and are familiar with the terms and conditions; and if we feel that their proposed activity is inequitable, we refuse to approve it.

Q. Do staff representatives or other representatives of the AEC—and did they during this period of time—meet jointly with the Carbide representatives in contract with vendors?

A. On occasion they have. Generally they do not. But there have been occasions when we participated in the meetings with the vendors in order to make certain that the proposals that are submitted would meet our program goals.

Q. At times when your representatives did not meet along with Carbide representatives with the vendors, Carbide would make up this request and submit it to you people for your study and so on?

A. Carbide. They would send a complete file up which would be all the proposals and all the information that they had gathered as a result of this particular invitation for proposals; submit it to us with their recommendation, after they had evaluated the proposals.

We would review this to determine whether the evaluation was properly done and whether we could in all fairness [fol. 289] approve the request of Carbide.

Q. Did you at times have to turn them down?

A. Yes, we have.

Q. Did you at any stated intervals—or maybe at irregular intervals it was—conduct an appraisal of the procurement activities of Carbide?

A. Yes, sir, at least once a year there is an appraisal of the operation of the procurement function as such without any attempt to compare the operation with regard to their procedural manual.

In addition to this overall appraisal, there is at least once a year conducted an audit of the procurement function in relation to how it is performed with regard to the procedures that we have approved. Any deviations are noted. Generally they may be just minor, but if they are major, they are immediately called to attention and corrected.

Q. Let me show you another group of papers here consisting of some 15 sheets, and ask you to file this as Exhibit C-29.

(Exhibit No. C-29 was filed.)

Q. I take it that the letter dated December 30, 1955, is a report from you to Union Carbide on one of these annual appraisals you have now been talking about?

A. Yes, sir, this is a letter that has been written which I have signed, advising Carbide that we have appraised [fol. 290] at this particular time the property management operations, that we have found it satisfactory.

Q. In addition to the correspondence which appears in the early part of this exhibit, I find some reference to the

Atomic Energy manual back on pages 9, I believe, through 15 of this exhibit. Will you comment on it?

A. These are the manual policies that we have prescribed for use of the contractor in carrying out his property management function.

Q. Was it frequent or on rare occasions where it was found necessary to make changes in the provision of these manuals?

A. I think that when you take all the manuals into consideration as one group, yes, there are frequent changes made in the manuals.

Q. And those changes were made for the reasons you have heretofore indicated in your testimony this afternoon?

A. Those changes are made for that reason, yes, sir.

Q. I take it that Carbide in its operations under this contract carried inventories of various types of supplies, the property of the Atomic Energy Commission, did it not?

A. Yes, it does.

Q. Was there any control exercised by the Atomic Energy Commission over these inventories, the quantities thereof, and so on?

[fol. 291] A. Yes.

Q. Explain.

A. The Atomic Energy Commission established inventory levels in certain categories with which the contractor must comply and which we constantly reviewed and assured that compliance.

Q. I show you here a group of six pages and ask that it be filed as Exhibit No. C-30.

(Exhibit No. C-30 was filed.)

Q. These sheets which I have handed you, and which you have filed, are all from the manual, are they not?

A. Yes, sir, they are from the AEC manual and as implemented by Oak Ridge Operations.

Q. The first four pages being from the AEC manual and the last two from the Oak Ridge Operations manual?

A. That is correct.

Q. Why was the Atomic Energy Commission interested in the level at which these inventories would be maintained?

A. First of all, it is part of our budgetary system that

we use. We are essentially operating on what is known as a cost of performance type budget in which the cash is represented both by funds needed for operations and inventories available to that operation. And this is why it is so desirable to maintain the inventory at a level which will give you the greatest turnover during the course of a given [fol. 292] period. This is just sound business practice to not tie up your capital in inventory.

Q. What, if any, controls were exercised with reference to the obtaining of articles, pieces of equipment, automotive equipment, and so on, from other governmental agencies for the use of Carbide on this contract?

A. With regard to automotive vehicles, of course, all vehicles used by Carbide in Oak Ridge Operations are provided by the Atomic Energy Commission, who in turn obtains them from the General Services Administration, and who purchases all motor vehicles for the Government.

These vehicles, before they are turned in or replaced, are checked as to meeting the minimum standards of mileage and age.

In addition to obtaining equipment from that source, we are sometimes able to obtain equipment from other operations of the Commission, maybe given equipment that is surplus, or other Government agency where equipment is surplus, at which time we arrange to transfer this, and at which time we would require that Carbide use it.

Q. What about requiring Carbide to substitute some other type of equipment for the equipment they had specified in their request that is submitted to the Atomic Energy Commission?

A. Equipment, of course, must meet the need for which [fol. 293] it is being obtained, and if we are able to obtain equipment from surplus or other agencies that will do the job equally well, then we require Carbide to use that equipment and not purchase new equipment.

Q. And was that policy followed during the period we are here interested in?

A. Yes, sir.

Q. I show you here two pages which I ask be filed as Exhibit C-31, and ask you if it has reference to the type of transaction you have just now been testifying about?

(Exhibit No. C-31 was filed.)

A. Yes, sir, both of these letters illustrate that.

Q. Is this typical of the procedure that was followed in such instances during the period here involved?

A. Yes, sir.

Q. I also show you a substantial number of sheets or copies of a substantial number of sheets taken from the manual, some from the AEC manual, some from the Oak Ridge Operations Office manual, and ask you to explain briefly what these sheets are and what instructions they cover.

A. They cover the Atomic Energy Commission procedures and policy with regard to the utilization of property and the disposal of surplus personal property.

Q. Were these procedures followed by Carbide in its operation under this contract at Oak Ridge during the [fol. 294] period here involved?

A. They were.

Q. Will you file this group of papers as collective Exhibit No. 32.

(Exhibit No. C-32 was filed.)

Q. You have already testified about an exchange sometimes made between Carbide and other management contractors or other governmental agencies to Carbide. Do you have here an exhibit showing typical instances of such transfers?

A. I do.

Q. This exhibit is composed of photostatic copies of various letters between Carbide and AEC which evidence transactions of this type?

A. They are.

Q. Are they typical of numerous or frequent other transactions of this sort?

A. Yes.

Q. And which transactions occurred during the period with which we are here concerned in this litigation?

A. They do.

Q. Will you file this as Exhibit No. 33, please.

(Exhibit No. C-33 was filed.)

Q. In connection with the operation of Carbide at Oak Ridge under the contract, was it permitted to acquire title

to land or to easements in property in connection with its [fol. 295] operations there?

A. Was Carbide permitted?

Q. Yes.

A. No.

Q. Was Carbide permitted to?

A. No, they were not.

Q. Carbide owned no land within the Oak Ridge area?

A. Carbide owns no land within the Oak Ridge area on which the Commission has any activities.

Q. From time to time during the period that Carbide has been operating under its contract at Oak Ridge, I believe it became necessary to acquire additional land in that area. By whom and under what conditions was that acquired?

A. That was acquired by the Government. The Atomic Energy Commission was authorized by the Congress to expand its holdings because of plant needs, and we then by arrangement with the Corps of Engineers of the Department of Defense arranged to have them obtain the land for us.

Q. When you say "us," you mean—

A. I mean the Atomic Energy Commission.

Q. Arranged for the AEC?

A. Yes, sir.

Q. And then certain portions of it might be used for construction of buildings in which processes were carried on by Carbide under its contract?

[fol. 296] A. Yes, sir. It would be acquired for whatever purpose was designated.

Q. Do you recall other phases of property management which we have not hereinbefore referred to in which AEC established policies or criteria or procedure?

A. Yes. We have established and prescribed policies for use by the management contractor in the area of warehousing and storage, establishment of shop stores and sub stores, maintenance of the property and storage records, inventory control which I think I mentioned previously, the procedures for taking physical inventories, control of sensitive property items, and of special controls of items of high value, and the disposal of excess property or surplus property.

There are others that I have to go through the manual to actually detail them.

Q. Suppose that Carbide wanted to lease or borrow property from some other AEC office or contractor.

A. Well, they would not lease it. It would be—the transfer for Carbide use would be arranged by the AEC, by the AEC through the Operations Offices.

Q. Was there any established policies that you required Carbide to follow in connection with the use of Government vehicles that were there on the job?

A. Yes.

[fol. 297] Q. Explain briefly, please.

A. They are required to use them for the official use of the project only. They may not be used for their personal uses.

Q. Was there any charge made one way or another between Carbide and AEC for the use of these vehicles?

A. No, there was not.

Q. In other words, the Atomic Energy Commission furnished these vehicles to Carbide that were used in the official work of Carbide there at the project?

A. In the official work of the Commission which Carbide was conducting there, yes, sir.

Q. And they were fueled with fuel?

A. With Government fuel.

Q. Gas owned by the Government?

A. Yes, sir. There were times when some of these vehicles would go on the road, in which case it was necessary to buy gasoline at gas stations on credit cards, but those credit cards reflected and the billing was to be made against the Oak Ridge Operations Office of the Commission.

Q. What about maintenance and repairs of those vehicles?

A. The maintenance and repair was done wherever possible in the shops that are associated with the operations conducted by Carbide, or they would be sent out to private [fol. 298] shops in the area in the event they could do it faster and better, but the cost thereof would be borne by the Atomic Energy Commission.

Q. What about parts that were placed in those vehicles or tires for replacements and so on?

A. The tires would be obtained, procured by Carbide from the general schedule supply contracts that are entered into by the Government for items of that nature or would be possibly ordered from the General Service Administration depots which are scattered around the country.

Q. At these general service depots the Government maintains stocks of certain types of inventory, does it not?

A. It does.

Q. Those would be procured, or some of these parts and perhaps tires, and other supplies, would be supplied at times from these depots?

A. Yes. Carbide was given a delegation of authority or power of attorney to execute or prepare purchase orders requisitioning supplies from these depots. And they had already been paid for by the Government. So they were really in effect Government furnished items. They were owned by the Government when they were resting in those depots.

Q. And regardless from which of these sources these parts or supplies were obtained, when they reached the Oak Ridge area, they were at all times the property of the Government?

[fol. 299] A. They were.

Q. I think we have a group of pages from the manual, some from the AEC manual and some from the manual of the Oak Ridge Operations Office, and also attached thereto certain correspondence or copies of correspondence between Carbide and AEC officials setting forth the facts and the correspondence setting forth the types of transactions we have just been referring to. Is that correct?

A. Yes, sir.

Q. Will you look at the exhibit?

A. That is correct.

Q. Now I believe there is included in this exhibit some additional matter that I haven't referred to in this question.

I ask you to turn to page 194 and the immediate succeeding pages. And will you explain what those are, or what those pages indicate?

I am referring particularly to a letter from Carbide to Berkowitz & Co. dated December 10, 1956.

A. This is a notice of award of a sale of surplus property, of AEC property at Oak Ridge. The notice is to M.

Berkowitz & Co. of Youngstown, Ohio, and it indicates that certain lots in this particular sale have been awarded to him as the highest bidder.

Q. What is the next page in this exhibit identified in the [fol. 300] lower left-hand corner as page 195? What is that?

A. This is a photostatic copy of the actual bid.

Q. Take the first part at the top of the page and the latter part at the bottom, please.

A. The first part is an invitation soliciting a Bid on the surplus property. The lower portion of it is the actual bid filled out by the Berkowitz Company submitting its bid for the three lots in question.

Q. In connection with this bid, I believe page 207 is the breakdown in the bid showing on what basis the bid was submitted.

A. Yes. I might explain this by pointing out that when surplus property is sold, it is divided up into a number of lots in order to give the widest participation in competition. And this merely reflects that this particular invitation contained 30 lots on which persons were privileged to bid individually or in entirety as they chose fit.

Q. This exhibit shows that this particular bidder bid on three lots—11, 18, and—

A. He bid on lots 4, 5, 11, 18, 21 and 22.

Q. He was awarded the sale on lots 11, 18, and 21?

A. I have to go back and look here. Lots 11, 18, and 21, he was high bidder on, yes, sir.

Q. And 22?

A. 11, 18, and 21.

[fol. 301] Q. There is also enclosed as a part of this exhibit the invoice that was made for the sale of this property?

A. Yes, sir, there is a copy of this, photostatic copy of the invoice.

Q. I believe we have covered this exhibit fully enough. This is marked and filed as Exhibit No. C-34.

(Exhibit No. C-34 was filed.)

Q. Does the Atomic Energy Commission in any wise control the transportation policy and procedures which

are followed by Carbide in performance of its services under the Oak Ridge contract?

A. Yes, we prescribe policies and procedures for Carbide to observe in the conduct of whatever shipping functions are necessary in the operation.

Q. Are these procedures in general set forth in the Atomic Energy Commission manual and in the local Oak Ridge manual?

A. The policies and procedures are set forth in the AEC manual and the Oak Ridge implementation.

Q. I will ask you if you have here a copy of the manual provisions just referred to and also of letters addressed to Carbide directing that it shall follow these procedures?

A. I have.

Q. The directions are set forth in two letters, I believe one dated December 9, 1955, and the other March 5, 1957. [fol. 302] A. They are.

Q. I note that in the letter of March 5, 1957, the statement is made: "Such bills of lading must contain this endorsement." Do you find that?

A. Yes, sir.

Q. "This shipment is the property of and the freight charges are assumed by the U. S. Government, subject to the provision of Section 22, Quotation No. 1-C Supplement No. 3." Is that correct?

A. Yes, sir.

Q. Will you file this group of papers or sheets as collective Exhibit No. C-35.

(Exhibit No. C-35 was filed.)

Q. I have here and hand you for filing as Exhibit No. 36 a short form memorandum acknowledgment that a bill of lading has been issued for the transportation of certain items. You have that in your hand, do you not?

A. I do.

(Exhibit No. C-36 was filed.)

Q. This is to be shipped, I believe, over the Dixie Ohio Express, a motor common carrier, from Oak Ridge to what point?

A. Dunkirk, New York.

Q. In what instances was this form of memorandum acknowledging issuance of bill of lading used?

[fol. 303] A. This was used in a shipment from Oak Ridge to Dunkirk.

Q. Made by whom?

A. Made by Carbide as our management contractor, sending boxes of machinery to the Alco Products, Inc., at Dunkirk, New York. And the use of this form was prescribed whenever advantage was to be taken of a Section 22 quotation.

Q. I don't want to interfere with your testimony, but was this used with reference to form 22?

A. It may not be. I am just trying to identify it.

Q. I will just ask you to read into the record the language that is on this instrument on the right-hand side right under or beneath the words "To be prepaid." Will you read it into the record, please?

A. "This shipment is the property of and the freight charges are assumed by the U. S. Government. It is understood and agreed that this shipment is made by the consignor for and on behalf of the U. S. Government; that the consignor is authorized to and will make payment due hereunder as consignor or shipper from Government funds advanced and agreed to be advanced to it by the U. S. Atomic Energy Commission and not from its own assets; and that nothing herein shall preclude liability of the Government for any payment properly due hereunder if for any reason such payment is not made by the consignor from such Government funds."

[fol. 304] Q. How did the procurement of such items as electric energy, gas, and process materials compare in value with the expenditures that were being made on the Carbide contract for equipment, machinery, and so on?

A. Well, during the period in litigation, the volume of direct AEC procurements of the types of items you have just mentioned approximated about \$424,000,000.

Q. Those procurements were made how?

A. They were made by the Atomic Energy Commission, the Oak Ridge Operations Office, and paid for by them directly.

Q. Did Carbide do any of that procuring itself?

A. No.

Q. Now the type that Carbide did do, such as machinery, equipment, and so on, you know about the volume of such procurements dollar-wise?

A. During that same period —

Q. Right.

A. —it approximated about \$94,000,000.

Q. This morning you mentioned the fact that the Atomic Energy Commission supervised and had something to do with security regulations insofar as the operations and services of Carbide under this contract are concerned. Would you enlarge briefly on that?

A. Through the manual, the Commission, the Atomic Energy Commission has prescribed procedures and policies [fol. 305] which we require Carbide to observe in the safeguarding of information, restricted data, in the safeguarding of the plants against sabotage or damage, in the manner in which the perimeters of the plants which are all fenced are to be patrolled, in the number of such guards that are assigned to that work.

Q. Who determines the number of guards assigned to it?

A. The AEC.

Q. What about the arming of those guards? Or are they armed? Or who determines whether they are armed or not?

A. The Atomic Energy Commission is authorized under the Act to designate both direct AEC employees and contractor employees as eligible to bear arms, and we have done so with regard to the Carbide employees that are engaged in guard activities.

Q. What about security clearance for these employees?

A. The security clearance, of course, is a requirement for every employee that is involved or employed in an area where there is restricted or classified information and all of these employees must be cleared.

Q. Does the Atomic Energy Commission have any personnel that oversees the enforcement of the security provisions by Carbide?

A. Insofar as the security of the plants is concerned [fol. 306] and the manner in which restricted data is safeguarded, yes. By periodic appraisals our knowledgeable people in the security field review and appraise the contractor's performance and report thereon.

Q. Is there any check made from time to time by Atomic

Energy Commission personnel to see whether or not or to what extent Carbide is carrying out the requirements of AEC with reference to security?

A. Yes, it is done both on a regular basis and on an unannounced basis in order to insure that the guarding is being done properly.

Q. I believe you this morning mentioned something about that in some way the Atomic Energy Commission supervised or exercised some control with reference to health and safety regulations promulgated either by Carbide or for Carbide by AEC. What were you going to say about it?

A. In this field, like in others, the AEC manual and the Oak Ridge implementation prescribe procedures which must be observed by the contractor in the health and safety phases of the operation. We prescribe methods for reporting incidents. We attach degrees of sensitivity to incidents, and in certain cases are members of or chairman of boards investigating incidents and make reports thereon.

Q. I take it in the operation of Carbide under this contract there is such a thing as an exposure to radiation, [fol. 307] is there not?

A. There is.

Q. Who prescribes the standards of permissible levels for exposure?

A. This is prescribed by the Atomic Energy Commission.

Q. What did you do, if anything, in reference again to this period of time involved in this litigation, to see that those standards were observed and followed through?

A. The manner in which this is done is thus: The employees who have any access to areas in which there is a likelihood of radiation exposure all wear a special type badge which would indicate exposure to radiation of various kinds at any time. And these badges are periodically developed and the individual records maintained of these employees to enable us at any time to determine how much exposure the employee has actually suffered.

Q. That is what I am getting at: Who maintains those records, and what does the AEC have to do with the maintenance of those records which affect the individual employees on the Carbide payroll?

A. The contractor maintains the records for us, and they are the AEC records. We audit those frequently, and, of

course, do this both by visual review of records themselves and by reports.

[fol. 308] Q. Suppose that someone has been exposed, perhaps due to some unusual condition, to radiation. What arrangement is made with reference to medical treatment and supervision, and who handles it? What do you have to do with that?

A. The Atomic Energy Commission is extremely concerned about any overexposure above the levels that it has established, and at the first indication of any overexposure it immediately directs certain steps be taken, such as reference to special medical experts who will determine what treatment, if any, is required, and the progress of the patient, if he happens to be a patient.

But the main responsibility there is the Atomic Energy Commission's. They are interested in knowing about these things.

Q. I believe you have already testified that the Atomic Energy Commission set up the standards for safety in this connection?

A. Yes, sir.

Q. What about fire hazards about these plants? And when I refer to plants, I mean those operated by Carbide?

As part of the Oak Ridge Operations Office organization there is a unit which deals exclusively with safety of the plant construction and operation, and periodically make inspections of the plants to insure that they are as safe as [fol. 309] we can possibly make them from fires. This involves inspection of sprinkler systems, recommendations to the Manager of Oak Ridge Operations that additional sprinkler facilities be installed or other safeguards installed to insure that fires are kept to a minimum.

Q. In the event that litigation occurs as a result of, say, exposure or claimed exposure to the radiation hazard, what, if anything, does the Atomic Energy Commission have to do with these employees or the litigation?

A. Presumably it depends on whom is being sued, but if the company is being sued, as soon as they receive notice of institution of a suit—

Q. You say the company. You mean Carbide?

A. When Carbide receives notice of institution of a suit, they immediately notify the Oak Ridge Operations Office.

At that time we in consultation with our Washington headquarters office determine whether we should authorize Carbide to hire private counsel to defend the suit, whether we should participate in the suit, or whether the Justice Department will take over the defense of the suit.

We might also indicate to Carbide go ahead and permit the counsel for the insurance carrier that carries workmen's compensation defend the suit if we feel our interests are adequately protected.

Q. In other words, the Atomic Energy Commission then [fol. 310] determines the method of handling the defense of litigation of that sort?

A. Yes, sir.

Q. Who determines what outside visitation may be had of any of these plants on the Oak Ridge area where Carbide is carrying on its contract, either as visitors or official personnel and so on?

A. It depends on the classification attached to the facility and the sensitivity of the information contained there as to the manner in which access to these plants may be granted.

If it is a sensitive area and where restricted data is to be found, the clearance for access to the area must be obtained from Atomic Energy Commission, so that we are always in a position of knowing who enters there, because we have to advise the contractor as to the individual that will present himself for access to the area.

Q. Is that controlled by some of the manual provisions?

A. Yes.

Q. What about publication of articles of information concerning the operations or procedures or results of the operations that Carbide has at Oak Ridge?

A. All information that is of a declassified nature or does not have any sensitivity is transmitted to the unit. [fol. 311] I described this morning as attached at Oak Ridge for administrative purposes, Technical Information Service, who takes this information and publicizes it or makes a distribution on the basis of an established distribution list.

Q. What about somebody connected with Carbide just writing an article and circulating it?

A. If it has any sensitive information at all involved, what I mean by that is information which might be embar-

passing to the Government, the article is submitted for review to the Atomic Energy Commission at Oak Ridge prior to its release.

Q. Do you recall any of the other policies or procedures that may be followed at Oak Ridge by Carbide under which or for which rather the Atomic Energy Commission has established the procedures? Any that I haven't mentioned?

A. Practically all of the operations of the management contractors at Oak Ridge are governed by procedures of one sort or another.

Q. Let me ask you this, and it comes about because of something that was asked Mr. Sapirie yesterday. What about the providing of training or experience to employees of private firms in connection with the work being done at Oak Ridge or the application of atomic energy?

A. There is a procedure to cover that. In order for any private firm to make one of its employees available for [fol. 312] training in the facilities operated for the Commission by Carbide, that firm and Carbide execute an agreement which clearly establishes the basis on which this business is done. This is a form which has been prepared by the Oak Ridge Operations Office and prescribed to Carbide for its use in those situations.

Q. Is Carbide free to use its own judgment in the obtaining of insurance of one type or another in connection with its work or execution of bonds, or to what extent, if at all, does AEC enter into that picture?

A. Carbide has no latitude in the finalizing of any arrangement for insurance, regardless of what type it is. All requests for insurance coverage are submitted to the Atomic Energy Commission, reviewed by it, and if deemed desirable are approved and Carbide is then permitted to go ahead.

Q. It first has to be approved by the Atomic Energy Commission?

A. This is correct. This is true of workmen's compensation, bond and indemnity insurance, any employee insurance plans such as group life, group hospitalization, accident plans. All of these must be submitted for our prior approval.

Q. You stated this morning that there were instances where under direction of the Atomic Energy Commission

Carbide sold materials like these used materials or pieces [fol. 313] of equipment and perhaps some other matters.

What about the method of billing for such sales, and collection, too?

A. The billing of such sales is done on an invoice form which we reviewed here shortly before which indicates that Carbide is acting for the Atomic Energy Commission.

The collections based on these sales, as a result of these billings, are deposited to the general Government Fund Account No. 1 that we discussed this morning.

Q. Suppose a sale is made to somebody that goes broke or doesn't pay. Who determines uncollectibility or when there should be a charge-off or something of that sort?

A. The determination as to whether an account is uncollectible is made by the Atomic Energy Commission.

(A recess was had.)

Q. Before I go to the latter part of this examination, I want to call attention to the fact that just before we took the recess I had asked you, Mr. Vanden Bulek, whether or not there were any other management areas in which AEC had established policies and procedures or requirements which Carbide was required to follow in connection with the operation under its contract at Oak Ridge. And I asked about a number, and I cut you off before I gave you the opportunity to mention any others you cared to mention.

A. As I stated at that time that there are numerous [fol. 314] practices, and I would like to mention some of them for the record. We have one practice or procedure which we have imposed upon the management contractor there to report to us any theft or other misuse of Government property, whenever it comes to their attention that something is missing immediately notify us, and, of course, we then go ahead and investigate this and may turn this over to the FBI for investigation.

If there is at any time any evidence of any graft, our procedure requires that they immediately notify us, and we proceed to investigate from that point on.

If they receive communications from persons high up in other Government agencies, such as perhaps a Congressman writes them a letter, they will reply to it but they will

give us and will coordinate their reply with us and give us copies of the exchange of correspondence.

If they want to engage in and/or enter into an arrangement with private industry for the use of the Commission's facilities at Oak Ridge in connection with private industries' program of research, they are required to submit the entire arrangements to us for review and approval. The Manager at Oak Ridge Operations has certain limitations on the amount of such research, the cost thereof, that he can approve beyond which the General Manager passes on this personally.

[fol. 315] We prescribe procedures for the retention of records and their disposal, for the safeguarding and even microfilming of vital records. We have detailed procedures governing that operation.

I think that about describes a good cross section of the type things we do. I am sure there are more of them, and it would take an actual detailed examination of the actual AEC manual to ferret them all out.

Mr. Kramer: I would like this record to show that the total tax liability in accordance with the reports that have been furnished to the Department of Revenue of the State of Tennessee by Carbide under the procedure which was set up by agreement between the State of Tennessee and the Atomic Energy Commission and without objection by Carbide, and that the total amount that would be owing and for which recovery would be obtained, if the State is successful in all of its claims herein, from Carbide, from the period May 1, 1955, through February 29, 1960, is \$4,408,741.49; and that the amount that would be due from other contractors under this same arrangement for this same period is \$545,151.73, making a total of \$4,953,893.22.

You may cross examine.

The Witness: I would like to just add a little general statement before I finish on what I have already said, if I may. And that is this: During the course of my testimony [fol. 316] I have indicated that we have adopted numerous procedures which we have prescribed for the contractor.

I think it is worthwhile to also mention that we don't just rely on the procedures themselves to insure compliance with them. We periodically audit all of the contractor's

operations with regard to these procedures in a variety of ways.

The first method which we have directed the contractor to institute is its own internal audit program. This is a group of auditors that are not attached to any particular office but report directly to the principal representative of Union Carbide at Oak Ridge. They audit the operations in regard to compliance with the approved procedures and list any deficiencies that they find.

The results of that audit are made available to the Oak Ridge Operations Office and who in return review the adequacy of that audit and test check it to determine its adequacy, and may or may not make recommendations thereon.

Beyond that the Oak Ridge Operations Office has its own audit team which covers areas that are not covered by the contractor's internal audit and prepares reports thereon in determining compliance by the contractor with the operating procedures.

There is a third group that is involved in this picture, and that is an Atomic Energy Commission regional audit staff [fol. 317] which is stationed at Oak Ridge, and they review the work done by the Oak Ridge Operations with regard to its management contractors and determine that we have done, that Oak Ridge Operations have done an adequate job.

Then there is one final group which has entirely a free hand in how it reviews the operations of the Commission, and that is the General Accounting Office. And they audit the management contractor's operations very, very meticulously and render reports thereon for our information.

I just wanted to point out that we don't rely just merely on an issued procedure for the adequacy of the work being done.

Mr. Kramer: Now you may cross examine.

Cross-examination.

By Mr. Rice:

Q. Mr. Vanden Bulek, it has been testified here that there are certain types of procurements which Carbide makes upon which it has to obtain the prior approval of the Atomic Energy Commission. Is that not correct, sir?

A. Yes, sir.

Q. Those types, as I got them, were procurements involving the expenditure of over \$100,000, and all cost type or time and material subcontracts. Is that all? Those latter without regard to amount, as I understand.

A. The latter without regard to amount. There are some [fol. 318] others. If at any time Carbide decides to subcontract a part of the work that is assigned to them for performance they must get the Atomic Energy Commission's prior approval.

Q. But now as to any amount under \$100,000, any procurement under \$100,000, that is, which is not a subletting, Carbide can make such a procurement on its own motion and without AEC approval; is that right?

A. That is correct.

Q. With respect to these amounts and these purchases on which AEC approval is required, how often as a practical matter will AEC disapprove a purchase order which Carbide proposes to let?

A. I can't pinpoint what might have happened during the period of this litigation, but I do know that in the past year there have been at least two such instances.

Q. Two out of how many would you say just as a rough figure?

A. It would have to be rough. I have no yardstick at all. It could be two out of 50.

Q. There would be only 50 you think?

A. I have no yardstick at all for measuring that number.

Q. You would agree a very small percentage of Carbide purchase orders are disapproved by the Commission?

A. Yes.

[fol. 319] Q. As a practical operating matter?

A. As a practical operating matter.

Q. All right, sir. With respect to procurements by Carbide, is Carbide required to advertise for bids with respect to all or some of those procurements?

A. I think an examination of their procurement procedure indicates that this is a method whereby they can obtain supplies and materials and services. They can advertise on a self and bid basis, or they can advertise and receive proposals which are not sealed bids. But they always advertise or solicit proposals from a number of sources.

Q. Do they follow in general the same purchasing procedure as do agencies of the Government?

A. I think that I am qualified to speak insofar as the Atomic Energy Commission.

Q. Confine it to the Atomic Energy Commission, or to any other agency of which you may have personal knowledge as I believe the Corps of Engineers perhaps is one.

A. It is my opinion that they follow very closely the practices that are used by the Atomic Energy Commission.

Q. Can you pinpoint any differences between the system followed by Carbide and that followed by the Atomic Energy Commission procurement policies?

A. Yes. It needs a definition, however, of what the Atomic Energy Commission manual states are sealed bid [fol. 320] purchases versus negotiated. This is a matter of the agency's judgment—that anything that isn't obtained on a sealed bid arrangement and publicly open is not a bid purchase, and therefore has no other name except negotiated purchase.

Q. Do the terms of the contract between Carbide and the Atomic Energy Commission specify that procurements must be made either on sealed bids or on a negotiated basis?

A. The contract does not. The contract requires that Carbide observe the instructions and requirements of the Atomic Energy Commission as we make them known to them.

Q. As they appear in the AEC manual?

A. Yes, sir.

Q. And other directives. You spoke a moment ago about the AEC meeting with Carbide and the various vendors with whom Carbide has dealt relative to procurements. Can you state how often such meetings have taken place?

A. I have personally participated in at least one of these which involved a procurement of an unusual magnitude and a very novel piece of equipment, and I know there are members on my staff who have had occasion to participate in these meetings.

Q. Would you say this is a usual or ordinary thing or an extraordinary thing?

A. It is an extraordinary thing.

Q. Mr. Vanden Bulck, to your knowledge does Carbide [fol. 321] pay unemployment taxes?

A. Yes.

Q. They do. Does Carbide pay for its own postage or does it have franking privilege?

A. It pays for its own postage out of funds that we have advanced to it. The franking privilege is only available to the Government directly.

Q. The Government directly, and then Carbide is not a part of the Government.

A. Not for the purpose of exercising a franking privilege.

Q. You testified, I believe, that Carbide carried workmen's compensation on its employees, with the approval of the Commission?

A. Yes, sir.

Q. You have testified as to the disposal procedures for surplus property which Carbide may from time to time sell, and for other materials belonging to the Commission which Carbide may find the occasion to sell.

Are the disposal procedures utilized by Carbide the same as those which would be utilized by the Commission if it made sales of its own surplus property?

A. They are the same as the Commission's because Carbide is disposing of Government property, and there is no other method of disposing than to observe the regulations [fol. 322] prescribed for the Commission.

Q. Does the Commission—has it ever to your knowledge, disposed of any of its own property other than through Carbide?

A. Yes. Yes, there have been direct sales by the Commission.

Q. Are they handled in the same manner?

A. Yes, sir.

Q. As Carbide sales are, on behalf of the Commission?

A. Well, they are handled procedurally the same. The only difference being in that case the Atomic Energy Commission itself solicits the proposals or the bids, opens them, evaluates them, and makes the award. But the procedure otherwise is identical.

Q. With regard to the making of procurements of any kind by Carbide, is Carbide authorized to pledge the credit of the United States?

A. It pledges its ability to pay on the basis of the funds that the Government agrees to advance to them for that

purpose. And, if I am not mistaken, the purchase order indicates that the Government will pay directly in the event Carbide does not receive advances from the Government.

Q. Carbide itself does not pledge the credit of the United States except as to monies from the special Government fund about which you testified and of which I believe you [fol. 323] said there are three, Nos. 1, 2, and 5.

A. Yes, sir.

Q. That are maintained in a local bank.

A. It in effect pledges the Government's credit to that extent.

Q. I believe you testified at one point, Mr. Vanden Bulck, about a cost type contract or contractors which you have who operated on a cost plus fixed fee basis and who was reimbursed for his payments of his own funds rather than being permitted to use Government funds as Carbide is.

Can you identify that contractor?

A. For the period in question it would be extremely difficult. But they are in the nature of architect engineer contractors whom we negotiate the contract with for the purpose of doing engineering and design work for facilities that we are going to construct.

I could determine just which ones we negotiated on that basis during this period.

Q. You did, however, negotiate with some on that basis?

A. Yes, sir, we did.

Q. You have people that you deal with on a lump sum basis?

A. Yes, sir.

Q. Some of the subcontractors. Do you have people who [fol. 324] operate on a cost plus fixed fee like these we have just testified about here, who are reimbursed for their expenditures periodically but who do not draw them out of a special fund?

A. To go back to the first part of the question, you mentioned subcontractors. May I have the question read back?

Q. Yes.

A. I think there may be a little confusion here.

(The question was read.)

A. With regard to subcontracts, the Oak Ridge Operations Office does not enter into any arrangements with them.

They deal with their prime—with their superior contractor who may be a prime contractor with the Commission.

Q. Those people would deal with Carbide or one of the other prime contractors?

A. That is correct. With regard to the architect engineer contractors, these are, as you see, services of design nature, that they produce construction drawings and design drawings for the construction of a new facility, so that primarily these are personal services. The work is not performed at a conventional facility but is done away; it is performed away from the Oak Ridge area, and it may be in the architect engineer's home office. We do not advance funds to them. He expends his own funds for the work, and we [fol. 325] periodically reimburse him his costs, based on an audit by our financial auditors.

Q. There is no one working for the Government today—if my understanding is correct—no contractor, that is—who operates on a cost plus percentage basis?

A. No, sir. This is prohibited by law.

Q. That was my understanding. That has been I think since World War I or thereabouts, hasn't it?

A. Shortly thereafter.

Q. As a result of some bitter experience?

A. Yes, sir.

Q. Are there any contracts other than the types which we have mentioned here that ought to be mentioned, do you think Mr. Vanden Bulck?

A. Of the type where we reimburse instead of advance funds? The only things that I can think of are regular prime lump sum and unit price contractors where a contractor is paid on the basis of work as it is performed in a percentage fashion, is a lump sum bid for the total project to be constructed and as the work progresses we make partial payments based on engineering inspection or the degree of completion.

Q. Other than your prime contractor such as Carbide do any of these others execute Atomic Energy Commission purchase orders in making procurements?

A. No, sir, they do not.

[fol. 326] Q. They do not. Do you have any specific knowledge, Mr. Vanden Bulck, as to Maxon Construction Company?

A. I was aware at the time they were engaged in doing contract construction work at Oak Ridge.

Q. Was that during the period in question here?

A. I don't know whether they were actually involved in construction at that time. I would have to check the record on that. I just couldn't tell you offhand.

Q. What about Rust Engineering Company?

A. I think Rust Engineering would be the same. They constructed a facility in the Y-12 area that was described yesterday. Again I would have to check the record to determine the actual dates when they were in and out of there.

Q. Were they a management type integrated contractor or were they simply a cost plus fixed fee?

A. They were to the best of my recollection an integrated contractor because we advanced the funds to them for the prosecution of the work. Both Maxon and Rust were that type.

Q. What about AIT? You had contracts with them, I know.

A. Yes, sir, they were an integrated contractor.

Q. And MSI—the service contractor?

A. Management Service's contract was a similar type.

Mr. Rice: All right, sir, I don't believe I have any [fol. 327-329] further questions, Mr. Vanden Bulck.

Mr. Kramer: No redirect examination.

[fol. 330] CLARKE E. CENTER, being first duly sworn, was examined and deposed as follows:

Direct examination.

By Mr. R. R. Kramer:

Q. Will you state your name as you usually sign it, please.

A. Clark E. Center.

Q. What is your age and your place of residence?

A. My age is 55. Residence is Route 3, Kingston, Tennessee.

Q. By whom are you employed at the present time, and in what capacity?

A. I am employed by Union Carbide Corporation. I am a vice-president of the Union Carbide Nuclear Company which is a division of Union Carbide Corporation.

Q. Is that the division that operates the plants at Oak Ridge?

A. Yes.

Q. There have been in the years some changes in corporate name of the company holding this contract. Is the name that you have just given the name under which the operations were had in '55 through '57?

A. Yes.

Q. Do you reside here in East Tennessee, and have for quite a number of years?

[fol. 331] A. I have lived in East Tennessee since April of 1944. For 14 months prior to that time, my residence was in New York, but I spent half time in Tennessee.

Q. During that 14 months period, who were you employed by?

A. Carbide & Carbon Chemicals Corporation, which at that time was a subsidiary of Union Carbide & Carbon Corporation.

Q. When did your first connection with Union Carbide & Carbon Corporation commence?

A. July 10, 1927.

Q. And I noticed you gave a rural route as your place of residence. You own a farm and live on that farm?

A. Yes, sir.

Q. Are you the top official of the Carbide, as I will hereafter refer to it, at the Oak Ridge Operations?

A. Yes.

Q. And have been since when?

A. January, '46.

Q. When you came to Oak Ridge in January, '46, who was operating at Oak Ridge? What governmental agency, I mean, was functioning there?

A. Manhattan District, the Corps of Engineers, U. S. Army.

Q. And then the Atomic Energy Commission took over when?

[fol. 332] A. January 1, 1947.

Q. And has been in control and direction since that time?

A. Yes.

Q. You are no doubt familiar with Contract No. W-7405-ENG-26 under which Carbide is functioning at Oak Ridge, are you not?

A. Yes, sir.

Q. Who directs the work that is done by Carbide at Oak Ridge under this contract?

A. Our directions come from the Oak Ridge Operations of the Atomic Energy Commission, specifically from Mr. S. R. Sapirie or his deputy.

Q. What functions very generally are your company performing under such directions?

A. We perform functions involving administration, operations, research, development, and engineering.

Q. Under the Oak Ridge Operations, as heretofore proven, there are other plants operated in addition to the ones located at Oak Ridge, Tennessee.

Do you have anything to do with the operation of any such plants?

A. The plant which is owned by the Government in Paducah, Kentucky, is also under my jurisdiction.

Q. How frequently do you visit the plant at Paducah, [fol. 333] Kentucky?

A. Oh, four or five times a year.

Q. Let me start with the materials upon which your operations function at the Oak Ridge plant. How are they furnished?

A. Many of the materials are Government furnished. For instance, the raw material which we use in the diffusion plant is furnished by the Atomic Energy Commission. All the power is also furnished by the Atomic Energy Commission.

There are other materials furnished which are not as valuable as these. We get many materials from the General Services Administration. Other materials we purchase as agent of the Atomic Energy Commission.

Q. What supervision, if any, is had by the Atomic Energy Commission over the purchase of those materials

which you actually purchase? In other words, to what extent does the Atomic Energy Commission supervise those purchases?

A. Well, in the first place, we supply to the Atomic Energy Commission for their approval our policy with regard to purchasing. This is a separate document which is revised from time to time with their approval.

To augment the policy, there are specific procedures which we use internally for the procurement of materials. These procedures are all subject to the approval of the Atomic Energy Commission before we put them into effect.

[fol. 334] Q. What about specific directions for any particular purchase or acquisition aside from the general plan which you have submitted and which has been approved by the Atomic Energy Commission? Are there any such?

A. Yes.

Q. Explain a little, please.

A. In general before any project is started, we have the direction from the Atomic Energy Commission that we may proceed in the engineering, in the preparing of drawings, and the writing of specifications for the material or the equipment. We then generally review the process, we review the types of equipment which are needed to be purchased first so that the project can be completed on time, and the overall supervision and concurrence of the Atomic Energy Commission is sought on all major pieces of such equipment.

Q. What about the operations of the plants themselves in connection with the supervision and direction given to you by the Atomic Energy Commission?

A. The Atomic Energy Commission directs the operation. They set the extent of the programs and the extent of the production schedules to be met by the plants. Those directions come to us in many ways—through a financial plan, through budget assumptions. We then prepare a budget from budget assumptions which is submitted to them for approval. This budget as approved then enters as part [fol. 335] of their record and part of the overall budget which is submitted to the Congress.

In general what I have just said provides the money to go ahead with a project.

I am in almost day-to-day contact with Mr. Sapirie—

telephone or visits to the office. We receive directions by letter. We also get overall policy decisions from Oak Ridge Operations.

Q. What is the purpose of this day-to-day contact between you on behalf of Carbide and Sapirie on behalf of the Atomic Energy Commission? What is the purpose and nature of those contacts?

A. To keep each other current on what is happening and the thinking of the Atomic Energy Commission with regard to their operations in the Government owned plants.

Q. In what way or by whom is the amount of output controlled at Oak Ridge Operations?

A. We get our directions from Mr. Sapirie, Oak Ridge Operations.

Q. What about a change or are there any changes in output in the type of production that you do produce?

A. There are many changes in the quantity of production and the levels at which we produce the various things.

Q. How and under what conditions do you get instructions for varying the amount of output?

[fol. 336] A. We do not make a change in the operation without the approval or without direction from Oak Ridge Operations.

Q. Is that true both as to the type of products and as to the quantity produced?

A. Yes.

Q. Where is the headquarters of Carbide located?

A. We are located at 30 East 42nd Street, New York, New York.

Q. What instructions or directions do you get from your headquarters of Carbide, or from any other office of Carbide, in connection with the operations at Oak Ridge?

A. I get no specific instruction with respect to the operations at Oak Ridge from Union Carbide Corporation.

Q. I note you use the word "specific." Explain what you mean.

A. By specific I mean the things that you do to change level of operation, the changes which might be required to improve operations. Those instructions come from the Atomic Energy Commission.

I do get guidance from Union Carbide with respect to our treatment of people, benefit plans, insurance, things

of that nature, because these people are employees of the Union Carbide.

Q. Let's digress a moment and get onto that. With reference [fol. 337] to these employment practices at Oak Ridge, explain the connection that the Atomic Energy Commission has and exercises over them and did during the period material to this litigation.

A. The numbers of people which we employ here are under the control of the Atomic Energy Commission by the amount of money supplied to perform certain work. In other words, the numbers of people required are determined by what is to be done in the programs which are specified by the Atomic Energy Commission.

Q. As I understand, you have nothing to do with those programs, that is, with the layout and planning of them. AEC does that and hands them to you people to fulfill?

A. Many times this works in both directions.

Q. Explain, please.

A. Many times the Atomic Energy Commission will send a letter to us asking us our comments on certain proposals with respect to program. We then prepare a report and send it to them. If it meets their approval, then we put it in as submitted or modified to suit them.

Q. At other times do the suggestions come from them?

A. Oh, yes, indeed.

Q. Or originate with them?

A. Many times these suggestions come from them. In many ways the programs can only come from them because [fol. 338] they have the overall knowledge of what is required by the Atomic Energy Commission. We do not have that knowledge.

Q. What does AEC have to do with approval of salaries or fixing of salaries of personnel employed at Oak Ridge?

A. AEC in the first place asks the contractor to submit to them their salary policy. This would encompass such things as levels of salary, and range of salary for certain job descriptions all the way from laborer to director of research or director of production; and along with that contractor's policy, submit the time at which salaries are reviewed for merit increase.

With that approval then you have an established salary policy.

Q. You stated that would be submitted to AEC?

A. Oh, indeed, yes.

Q. After submission to that approval or disapproval, what would happen before you put it into effect so far as AEC is concerned?

A. You submit this to the Atomic Energy Commission and then with their approval it is made a part of the contract. It is Appendix A, I believe.

Q. The contract between Carbide and the Atomic Energy Commission?

A. Yes, sir.

[fol. 339] Q. What about collective bargaining agreements so far as employees who are within bargaining units are concerned?

A. In general we discuss the collective bargaining contract that is in effect; we discuss with the AEC the desirability of attempting to bargain on changes. We discuss the limits with respect to wage increase or no wage increase. Things of that nature, in a very general way before we enter into that.

Q. Is the same true of fringe benefits?

A. These people are our employees. The fringe benefits are dependent upon what Union Carbide can pay in its private operations. We in Oak Ridge as a management contractor for the Atomic Energy Commission cannot exceed these perimeters established by Union Carbide Corporation.

This is one of the controls which the AEC exercises over what we can do for employees in Oak Ridge as compared to what the corporation does for employees in the private operations.

Q. You have told us about the submission of plans and discussion of plans before an agreement is entered into.

After a collective bargaining agreement has been negotiated between management of Carbide and the bargaining agent, whatever union it may be, are these agreements submitted to the Atomic Energy Commission for approval [fol. 340] before they are executed and become effective?

A. No. At the time we reach agreement, they are signed by the stewards of the bargaining group of the union, and the company's representative, with the knowledge that

they must be submitted to approval of the Atomic Energy Commission.

On the other hand, the union in their bargaining group, they must submit what they have signed with us to their membership for ratification, you see.

Q. But you do, after it has been signed by the representatives of the two bargaining groups, Carbide does submit it to the Atomic Energy Commission for approval?

A. Yes, sir, this is submitted in the form of a request for cost reimbursement for the changes in the contract as compared to the previous contract.

Q. And you do obtain approval?

A. Yes, sir. So far we have always received approval.

Q. You mentioned as one of the lines of work being done by Carbide at Oak Ridge a division or department engaged in research. Would you go into that a little and explain what you do and what supervision is exercised over that by Atomic Energy Commission?

A. We do research in programs for the Atomic Energy Commission in nearly all the fields of science. This would [fol. 341] include biology, chemistry, physics, nuclear engineering, metallurgy. There are five or six others which don't occur to me at the present time.

Q. How are these various subjects which are made the basis for research projects designated or chosen? What does the AEC have to do with that, and what does Carbide have to do with that?

A. Many times we are asked if we can do work in a field, and if we can do this work, can we perform certain things and have a list of, oh, ten or twelve items.

We then answer stating that we can. And probably get a letter back suggesting that we do, and that revisions will be made in the financial plan to cover this work.

Many times the Atomic Energy Commission requires various products which can be made, and in that event they will authorize us to go ahead and make these things.

Q. Do staff members of the Atomic Energy Commission follow in detail this work in research projects?

A. Yes, they follow them in detail.

Q. They have people of their organization, I mean AEC has people of its organization keeping constant touch with these research projects?

A. Yes.

Q. I take it those staff members of AEC work with you people on those projects?

[fol. 342] A. Yes. No. Work with us!

Q. Yes.

A. They keep themselves informed of the work which our people are doing.

Q. In other words, the staff of AEC does not go into the plant itself and actually perform functions on your research project?

A. No, sir.

Q. Or perform work on it?

A. No.

Q. But they do keep in constant touch with it in the form of following it carefully and accurately?

A. Yes, sir.

Q. You mentioned that your company under the direction of Atomic Energy Commission worked on engineering projects at Oak Ridge. Explain, please.

A. We work on many engineering projects for the Atomic Energy Commission. As an example, the expansion in the diffusion capacity which was required ten years ago. The engineering for this was authorized by the Atomic Energy Commission.

We were requested to make typical layouts of new plants and to do engineering and test work of the components of this plant to assure that the plant would be operable.

[fol. 343] Q. Let's get more recent period of time in the last five or six years, 1955 to 1957 or just before or just after. Can you give us illustrations of the type of engineering work you did under the direction of the Atomic Energy Commission, I mean at Oak Ridge?

A. We are continually doing engineering work and development to improve the process. As a matter of fact, we have a continuing program for process improvement in the diffusion plant which totals about \$20,000,000 a year.

The direction of the work is suggested and comes from the Atomic Energy Commission. By that I mean how much of this money will go into various parts of the separation process; what type of changes should be made, so that you get the greater gain or the most effective use of that money, comes from the Atomic Energy Commission.

These improvements are then installed at their direction in the two plants that we operate, and in the plant which is operated for them by another management contractor in Portsmouth.

Q. Portsmouth, Ohio?

A. Portsmouth, Ohio. Yes.

Q. To what extent does the Atomic Energy Commission control and guide this engineering work that you perform?

A. They not only guide the work in general overall concept but in many cases issue instructions with regard to [fol. 344] specific developments.

I have in mind a more recent one—possibly two years ago—wherein it was suggested that we look into the matter of recovery of waste heat for the production of electrical energy.

Q. Waste heat?

A. Waste heat, generated in the process. We have continued that. And not to the extent that we wanted to. We wanted to do it in a much greater overall manner. However, we were limited by instructions from the Atomic Energy Commission to the extent that turbines could be installed in the diffusion process.

Q. These turbines could be installed which would be operated through the medium of this waste heat?

A. Yes, sir.

Q. And you went no further than that. Why?

A. Mainly because it would not be considered as an allowable cost. We wished not to pay for it ourselves, but with money which is allowable under the terms of the contract.

Q. In other words, it was a limit placed on it by AEC?

A. Yes, sir.

Q. Through the financial control. In what manner, if at all, does the Atomic Energy Commission control in connection with administration? What functions do you perform and what way does AEC control them?

A. There is always the overall control of amount of money to be applied to the contract. This money then is broken down into various categories of production, research, and others. That is a limiting and controlling factor with respect to the administration, to the number of people which can be employed on the contract.

We also get instructions through their manual, through letters regarding purchasing, accounting, personnel relations—as a matter of fact, in all fields of administration.

Q. Are the instructions as given by the Atomic Energy Commission always followed by Carbide?

A. Yes, sir.

Q. Does Carbide make suggestions at different times which are accepted and sometimes rejected by the Atomic Energy Commission?

A. Many times in issuing an instruction the Atomic Energy Commission will ask for comments on the instructions. We then comment. Many times these comments are incorporated in the final instruction, and we are happy. Many times they are not, and we are considerably unhappy also.

Q. If not inserted in them, of course, you cannot follow them and do not follow them, in other words, if AEC [fol. 346] doesn't agree to them?

A. No, sir.

Q. Let's talk a little about finances. In what way are the finances handled for your operations under this contract?

A. Well, we submit budgets to the AEC yearly, for operations, research—for the entire operation.

Q. For what period then? For the next succeeding year?

A. The next fiscal year and the two fiscal years following that. Three years in advance, is it?

Q. It is your recollection it is three years?

A. It is my recollection it is three years in advance. It is my recollection that disturbs us very much to prognosticate that far into the future.

Q. Why do you submit them to cover that far in advance?

A. It makes you crystallize the thinking with regard to a continuity of program, things that should be done if the program continues for that length of time. I think that is the most salutary effect.

Q. Is that required by the AEC?

A. Yes.

Q. Three years?

A. This is in accordance with their instruction.

[fol. 347] Q. Explain somewhat in detail, though not too much those budgets, how they are made up, and what they

consist of, that you submit—the proposed budgets that you submit to the AEC.

A. For the period covered and prior to that, but after the advent of the AEC, we had amassed operating data and cost. We had operated at various levels throughout these programs, and you had experience then in what it took to do these things for the preceding year.

Based on that, we then can prepare a realistic budget which conforms to the prognostications for the succeeding two or three years. This then is done. Those figures and records are then used by the AEC—I believe, they are their records—to make up their overall budget which is then submitted to the Congress.

Q. In the summation of this budget, do you allocate various amounts to different functions? For instance, research, administration, engineering, operations, and so forth?

A. Yes, sir.

Q. What about the approval of such budgets so that you know the amount of money to be expended?

A. We submit in the way that I have described for the approval of the AEC. These budgets are then submitted to the Congress. The Congress then determines whether the budget will be approved for the amount of money submitted.

[fol. 348] After approval we then have an approved financial plan which means that the money is available. The money then is placed in their operating funds for use.

Q. Before I get to that, do you get notice from the Atomic Energy Commission of the approval of this budget, as modified if necessary, by the act of Congress?

A. Yes. We get notification from them of budget or we keep informed by what is going on in Congress. We do know, however.

Q. Do you in the operations at Oak Ridge use Carbide funds or are the funds furnished by the Atomic Energy Commission?

A. Funds are furnished by the Atomic Energy Commission.

Q. Will you explain briefly how and in what manner?

A. Each month we estimate the amount of money which will be required for the following month. That is broken

down into weekly amounts, and we receive a weekly check into their Government Fund No. 1.

Q. When you receive that check, what is done with it?

A. It is deposited in the Government Fund No. 1.

Q. In the name of Union Carbide, Government Fund No. 1; is that it?

A. Yes.

[fol. 349] Q. From that bank deposit or that bank account, what are withdrawals made for?

A. Withdrawals are made for the payment of materials from the Government Fund No. 1. Also withdrawals are made from No. 1 and transferred to Government Fund No. 2 which is the payroll account.

Q. Payroll checks for the employees at Oak Ridge are drawn then against Government Fund Account No. 2?

A. Yes, sir.

Q. But Government Fund Account No. 2 is composed of funds that you people withdraw from Government Fund Account No. 1?

A. Yes, sir.

Q. Is any of the money of Union Carbide Corporation itself com-ingled in either of these accounts, Government Fund Account No. 1 or Government Fund Account No. 2, with the Government money?

A. No, sir.

Q. Will you tell us briefly to what extent audits or checks are made upon your operations there. I am talking about financial now, by the Atomic Energy Commission or by other governmental officials.

A. We are audited by the Atomic Energy Commission auditors. We are also audited by the General Accounting Office. And we also audit ourselves with auditors working [fol. 350] for us but not connected with the financial operation.

Q. When you say "working for us," are they sent by the New York office or are they independent employees just for this project and under this contract?

A. They are employees hired by us under this contract in Oak Ridge.

Q. Are they in any wise connected with or do they function in any manner under Union Carbide's other operations?

A. No, sir.

Q. Union Carbide Corporation does have a substantial number of operations elsewhere then than in connection with the Oak Ridge project, do they not?

A. Yes.

Q. I believe that Union Carbide has another operation in Tennessee, does it not?

A. Yes, sir. Columbia, Tennessee.

Q. What, if any, connection is there between that so far as operations are concerned and the one at Oak Ridge?

A. There is no connection.

Q. Does Union Carbide Corporation have any contracts with the Atomic Energy Commission or with any governmental agency different from the one at Oak Ridge?

A. Yes, we do.

Q. Will you go in generally into the nature of those contracts [fol. 351] and point out to us some of the differences, please.

A. In the Union Carbide Nuclear Company, of which I am a part, we have—

Q. That is one you are vice-president of?

A. Yes. We have operations in Colorado and Wyoming. These mines and mills are owned by Union Carbide Corporation. They have been built, designed, and put into operation with money from the corporation. However, the installation of these mills was not possible until we had a supply contract from the Atomic Energy Commission to whom we sell uranium concentrates.

So then the size of the mill and the amount of material we therefore produce—I am speaking only of uranium—is determined by the Atomic Energy Commission. Now this material is paid for by the Atomic Energy Commission on a unit price basis.

Q. In other words, you sell it to the Government?

A. Yes.

Q. At a unit price?

A. Yes.

Q. Do you sell any materials for them out at Oak Ridge at a unit price for the Government similar to that and receive the money and proceeds from it?

A. The materials belong to the Government. So they tell us where to ship them.

[fol. 352] Q. Is that true of the materials produced at these other two plants, Colorado and Wyoming?

A. No, sir.

Q. Those are your materials?

A. Those are—it is well known by law uranium belongs to the Government. We are permitted by the Atomic Energy Commission to produce uranium for the Government in these plants. However, the materials are paid for on a pound basis by the Atomic Energy Commission.

Q. Does the Atomic Energy Commission exercise the same type of controls over your operations in those plants that it does in its plants that you operate at Oak Ridge?

A. Not in the least, no, sir. The control exercised by the Atomic Energy Commission is within the initiation and extent to which they write a contract for the production of these materials. Under this contract you agree to run these mills within the tolerance as permitted or set up by the Atomic Energy Commission. That is a control that is common to all uranium production plants which is exercised by the AEC. The operations, as I say, are privately owned, privately managed.

Q. And directed by Carbide rather than by the AEC?

A. Yes, sir.

Q. Are the procurements that are made for these plants that Carbide has out in Wyoming and Colorado handled [fol. 353] in the same manner as the procurements here at Oak Ridge?

A. No, sir. The procurements for the plants in Colorado and the western states are handled by the company through a local purchasing agent with the approval of our New York purchasing group. Large items are purchased in New York and not at the plants.

Q. Do you go to Government supply for any of your articles out there as you do at Oak Ridge?

A. No, sir.

Q. Do you buy materials or machinery or equipment under a Federal supply contract similar to the way you make certain of your purchases and procurements at Oak Ridge?

A. No, sir.

Q. And those methods are not followed at all out there?

A. No, sir.

Q. Is the authority for the operation of those plants, and method of conducting those operations, controlled in any manner outside of the quantity you are permitted to produce under the Federal Act by the Atomic Energy Commission?

A. No, sir.

Q. Does the New York office and the headquarters of the Carbide direct those plants?

A. Yes.

Q. I think you made a statement a while ago that the [fol. 354] uranium materials were actually owned by the Government, those materials which you people extract and process to some extent out in the mountain states.

Do you know whether those materials are actually owned by the Government?

A. I believe the Atomic Energy Act—

Q. The Atomic Energy Act may speak for itself. Do you know about requiring a license to produce them rather than Government ownership?

A. I am not familiar with it.

Q. We will let the Act itself speak.

You do not have any license, however, for the functions being performed at Oak Ridge, do you?

A. No, sir.

Q. The extent of your authority comes under this contract which we have been making reference to?

A. The contract is our license, yes.

Q. How long were you with Carbide Corporation itself or Carbide & Carbon Chemicals Corporation prior to the time you went into these Government contract works?

A. Sixteen years.

Q. You are familiar then with the practices of making purchases and handling purchases and procurements, are you not, by Carbide independently of that contract?

A. Yes, sir.

[fol. 355] Q. Mr. Center, earlier in your testimony you mentioned the fact that the Government had established policies with reference to the methods of handling finance, of budgeting and auditing the work you do at Oak Ridge and the accounts you handle there.

Were those set forth in a general plan? In other words,

was there a general plan that was set forth and which you used in connection with the handling of these items?

A. You are speaking of the time involved in the litigation?

Q. Yes, I am.

A. Yes. These plans had been established. We had changed many records which we had kept for the Manhattan District in conformance with instructions received from the Atomic Energy Commission.

Q. So that the plan followed during the time you have been operating under the Atomic Energy Commission differed in many respects from that followed while you were operating under the Manhattan District?

A. Yes.

Q. Was there a manual issued by the Atomic Energy Commission, and one issued by you also which was approved by Atomic Energy Commission, which manuals were followed in the procedures at Oak Ridge?

[fol. 356] A. Yes. Our manuals are patterned after their manuals.

Q. In addition to following the provisions of those manuals, you stated earlier that you got specific instructions on various items which you followed.

A. Yes.

Q. I want to show you here a photostatic copy of a letter dated November 4, 1955, purporting to be signed by Mr. S. R. Sapirie, Manager of Oak Ridge Operations of the United States Atomic Energy Commission, addressed to Union Carbide Nuclear Company, your attention, and which letter is a part of Exhibit C-20, and ask you to look at that letter just a moment and tell us whether or not that is a type of letter of instruction received by you and concerning which type you have recently been testifying?

A. Yes.

Q. This particular letter deals with what?

A. Midyear review instructions and related issuances.

Q. I notice that immediately following that letter in the same exhibit is another letter purporting to have been written to the Union Carbide by S. R. Sapirie, Manager of Oak Ridge Operations, and called to your attention, dealing with what?

A. Fiscal year ending 1956 financial plan.

[fol. 357] Q. Are those typical letters of the type of which you received from time to time during the period we are interested in here?

A. Yes, sir.

Q. Many or few of that type of letters containing instructions and directions received by you from Atomic Energy Commission?

A. We received many letters like this.

Q. In Exhibit C-22, and which is a collective exhibit consisting of a substantial number of pages, I notice the first sheet is a letter addressed to Carbide by Mr. Sapirie; dated May 27, 1955.

What type of communication is that?

A. This is a communication referring to a financial matter involving accounting and involving the payment of overtime costs.

Q. You had suggested a method or procedure to be followed if seems by that letter, is it not? And what was the action of the AEC with reference thereto?

A. We had suggested that a delay in the requirement for the monthly production cost report would save a certain amount of money per month in overtime costs.

Q. Why didn't you just go ahead and put that procedure into effect without submitting it to the AEC inasmuch as it was a money-saving device?

[fol. 358] A. They had required a target date for the submission of this report, needing the report at that time. We pointed out to them that they could have this report some time later at a less cost and at less trouble with us with respect to people in performing this work.

Q. Before making that change that you suggested, did you get an approval by the Atomic Energy Commission?

A. They didn't approve the delay in the report. They required the report at the date at which they had originally asked for it.

Q. And which procedure did you follow then?

A. We followed as originally instructed, sir.

Q. I want to call your attention to the next page in the same exhibit, or collective Exhibit C-22, and ask you what that is.

A. This letter concerned the time of cut-off and due dates

for year end closing. This then is an accounting request or directive.

Q. I believe it requests a review by the Atomic Energy Commission of the material submitted, does it not?

A. Requests us to make comments from our review of this material, and stating that they would be glad to discuss these with us. However, the thing is set forth here exactly how they want it done.

Q. Is that typical of many directions that you received [fol. 359] from them?

A. Yes, it is.

Q. The next page in that same collective exhibit seems to be addressed to Carbide by Sapirie and seems to discuss freight charges or rather the method of charging freight.

Will you comment on it, please.

A. We questioned who should pay freight charges on the return of an empty cylinder. And they suggested that we pay for it from contract funds furnished by them.

Q. Do you mean that even the details of how the freight charge on an empty cylinder should be charged and paid was controlled by directive from the Atomic Energy Commission?

A. Yes.

Q. I notice the next page in that same exhibit. What is it dealing with?

A. It is dealing with a method of costing materials to be processed in the production plant, telling us on what basis we shall cost these materials.

Q. In other words, a method or detailed description of method to be followed in connection with the handling of costs of the materials being used?

A. Yes.

Q. I want to go just one page further to the next page [fol. 360] in that same collective exhibit.

A. This is a letter dealing with the method of charging or posting an allowance for loss on stores inventory, to a preceding year's operation, rather than to a current operating cost. We are informed that our suggestion would receive careful consideration, and that we would be notified when the AEC study was completed.

Q. I want to go three pages further over in the same

exhibit to a letter, the first page of which does not bear the date. The second page is dated January 24th—I can't make that out.

A. I can't make that date out. Is there another copy?

Q. Anyway it is a two-page letter on the letterhead of the United States Atomic Energy Commission from Oak Ridge addressed to Union Carbide, your attention, and signed by Mr. Sapirie.

What does it deal with, please?

A. It deals in detail with the method of keeping an inventory record control on rare and precious metals in use. It is in effect a detailed accounting for these materials located in the plant.

Q. Were similar letters to that covering other matters in the plant in similar detail received by you from time to time?

[fol. 361] A. Yes.

Q. I call your attention in this same collective exhibit to a letter dated October 24, 1956, addressed by Mr. Sapirie, signed however by Mr. Vanden Bulek, and addressed to Union Carbide, your attention. It deals with what?

A. We had asked for instructions with respect to an uncollectible account, and we were told that we were to handle it in accordance with previous instructions given in the AEC manual.

Q. Did the Atomic Energy Commission direct you in the method of handling accounts which you found to be, or thought to be, uncollectible for materials which had been sold by the Government through you and which came from Oak Ridge?

A. We have instructions with respect to handling uncollectible accounts.

Q. Who determined when an account was really uncollectible under your procedure that you followed?

A. The Atomic Energy Commission.

Q. Is that true regardless of the size of the account?

A. We have a procedure which is approved by them wherein we attempt to collect these accounts, I believe by writing three or four times, many times threatening to sue, and in accordance with their approval, of course. And then [fol. 362] after such a time we feel we can't collect it, we report this matter to them and ask for further instruction.

Q. That procedure you referred to is one of the procedures set forth in the manual?

A. Yes.

Q. About which you earlier testified. But after following that procedure, before you charge them off as uncollectible, you have to have the approval of the Atomic Energy Commission?

A. Yes.

Q. I call your attention to the page in this exhibit, again undated, and when I say "this exhibit," I am referring to collective Exhibit No. C-22, and which appears near the back of the group of letters in this collective exhibit. It is one directed by Mr. Sapirie to Union Carbide, attention Mr. Center. And I notice that it deals with charges from an overseas shipment apparently, does it not?

A. Yes. Overseas receipt of material.

Q. What direction or type of directions does it give?

A. It asks us again to follow the manual with respect to the papers covering this shipment. Tells us also how to establish an account to reflect the charges before the transaction and which account to charge and the name of the account which is transportation and security shipments.

[fol. 363] Q. In other words, it directs in detail the method of handling this particular charge?

A. Yes.

Q. Was that typical or is that a rare exception of the type of instructions that you would receive?

A. This is typical of a type of instruction we would receive from the AEC with respect to receipt of materials, handling of materials, reporting of materials used in the plant.

Q. I want to call your attention to the third from the last sheet in this collective exhibit, being a letter dated February 1, 1957, directed to Union Carbide, your attention, from Mr. Sapirie—the letter, however, signed by Mr. Vanden Bulek, a two-page letter, and a part of this collective exhibit.

And I notice that it deals with invoicing of another Federal agency for excess property transfers. Would you care to explain a little about that one, please?

A. This letter suggests that we refer to preceding letters which we had received covering the same subject which is the method of invoicing other Federal agencies for property

transfers. It then proposes a change in the method of invoicing the agencies as outlined in this letter.

Q. It speaks for itself, of course as to general content. Is that typical of other letters somewhat similar to that that [fol. 364] you received from time to time from the Atomic Energy Commission during this period of time?

A. Yes.

(Whereupon, a recess was had from 12:00 o'clock noon until 1:30 o'clock p.m.)

Q. This morning we talked about some exhibits or portions of exhibits. I want to go into a little different field now, largely in the field of personnel, for a few moments concerning which you testified about the direction that the Atomic Energy Commission exercised over the personnel and personnel policies.

I refer now to page 1 of Exhibit C-24, which appears to be a letter from Mr. Vanden Bulek to Carbide & Carbon directed to your attention, and ask you to explain briefly what it is.

A. This refers to proposals submitted by insurance companies for group annuity contract.

Q. I notice that the letter apparently approves one of two plans which had been submitted and authorizes you to enter into a plan for group insurance containing the statement found therein. Is that correct?

A. Yes.

Q. Did you receive other similar advices in somewhat similar circumstances from time to time from the Atomic Energy Commission?

[fol. 365] A. Yes.

Q. Why didn't you just go ahead and choose the type of group insurance you were going to use and from the proposals submitted by the insurance companies rather than submitting the matter to the Atomic Energy Commission?

A. We have always felt that we are working for the Atomic Energy Commission, and all matters of cost are borne by the Commission. Therefore, that they should have the right to approve or disapprove any plans which would cost money under the contract.

Q. To what extent have you gone in recognizing the authority, and when I say "you," I mean Carbide, of the

Atomic Energy Commission to approve and control all types of contracts and so on that you enter into?

A. I would say almost completely.

Q. You recognize their word as supreme rather than a determination that Carbide might make on a given issue or question?

A. I do. But in some cases I want to check with my boss also.

Q. But when it is within the scope of the contract, do you follow the advice or instructions of the Atomic Energy Commission or of Carbide?

A. Of the Atomic Energy Commission. It is so stated in our contract that we shall do all things necessary to [fol. 366] the operation.

Q. I call your attention to a later page in this collective Exhibit No. C-24 which appears to be a letter addressed to Carbide, your attention, from Mr. Sapirie, the AEC Manager of Oak Ridge Operations. And you state what it is.

A. It is a letter giving us authorization to put certain groups on an extended work week. Our normal work week is 40 hours, and approval is required for extended periods of overtime on a continuing basis. On overtime arising out of emergency, where unable to get approval, or if we are able to get approval, we do it by telephone, and get the written authorization afterward.

Q. And this is a written authorization or a written approval of a request you had made for overtime hours or overtime payment for certain job classifications?

A. Yes, sir.

Q. Turn to the succeeding page in the same collective exhibit which appears to be a letter addressed to you, and dated May 7, 1956, consisting of two pages, by Mr. Sapirie, however signed by Mr. Wende, and addressed to Union Carbide, your attention.

Before asking about that, who is Mr. Wende?

A. He is Deputy Manager of Oak Ridge Operations.

Q. What about the relationship of his position so far as [fol. 367] AEC is concerned to Mr. Vanden Bulck?

A. Mr. Vanden Bulck does what Mr. Wende says. He is Deputy.

Q. This letter seems to deal with the participation of ORNL, Oak Ridge National Laboratory in other words,

Health Physics Division personnel. What does Carbide have to do with the Oak Ridge National Laboratory?

A. We are the operator. We operate the Oak Ridge National Laboratory for the Commission. This is one of the facilities which we operate.

Q. Under your contract which we have referred to above?

A. Yes.

Q. What would you say about this letter?

A. This is a request for the participation of two physicists from the Health Physics Division of the Oak Ridge National Laboratory to participate in an operation which was called Redwing. This was a request then that two of our employees go out of the country to perform work for the Atomic Energy Commission.

This sets forth in detail how much they shall be paid, for the time they are out of the country, and to pay them for an extended work week of 54 hours rather than our ordinary work week of 40 hours; authorizing us also to continue to pay these people under our Union Carbide policies [fol. 368] for the time that they are doing work out of the country.

Q. Was it a matter of rather frequent occurrence that your employees or employees at Oak Ridge who are serving under you would be designated for special missions by the Atomic Energy Commission?

A. This is almost a weekly occurrence, that someone is sent to either Europe or Japan or sometimes Eniwetok. Many of our people participated in both the Atoms for Peace exhibits at Geneva. I think 40 scientists were involved just a year and a half ago. This is an ordinary occurrence.

Q. And these people, although assigned I believe by AEC for these particular works, are carried on your payroll under such instructions as this?

A. Yes.

Q. Is this a type of the kind of letter you would receive for such work?

A. Yes.

Q. Do you want to read it?

A. I wanted to see if it came under the contract, and it does.

Q. Your answer is still "yes," after having read the letter in detail?

A. Yes.

Q. Let's take the next letter found in this Exhibit C-24, and which is dated June 14, 1956, from David F. Cope [fol. 369] to Union Carbide, and it is addressed to the attention of Dr. J. A. Swartout. Who is Mr. Cope?

A. Mr. Cope is a member of the Atomic Energy Commission staff located at Oak Ridge whose assignment is research.

Q. Who is Mr. Swartout to whose attention this particular letter was addressed?

A. Dr. Swartout works for Dr. Weinberg who is Director of the Oak Ridge National Laboratory. Dr. Weinberg reports to me. This procedure is established to relieve the work load on myself fortunately, but you notice here that I receive a copy of all letters addressed to Union Carbide.

Q. In other words, letters addressed to your department heads, copies thereof come to you?

A. Yes, sir. This particular letter here—

Q. You are referring to letter of June 14, 1956?

A. Yes. Had reference to foreign travel of Dr. A. C. Upton, suggesting or stating that he should prepare a report of the data that he obtains during his foreign travel.

We have to have such a letter to approve travel. In other words, we cannot send a scientist anywhere in this world without approval of the AEC.

Q. And you do obtain their approval before these [fol. 370] scientists are sent out on foreign missions?

A. Yes. Many times though we are asked by the AEC to send people to foreign countries, ask for suggestions who should go, who would be available.

Q. When they go on one of these missions, whether he has been chosen by you or AEC, he continues on—I mean the scientists continues on the payroll of Carbide?

A. Yes, with their approval, of course.

Q. When you say "with their approval," you are talking about Atomic Energy Commission?

A. Atomic Energy Commission, yes, sir.

Q. Further over in this same Exhibit C-24 I find a letter dated June 18, 1956, addressed to Mr. Mickelson of the Atomic Energy Commission and signed by yourself or somebody else for you. Whose signature is on that? I can't read it.

A. That is the manager of production who acts for me while I am not available. He is my deputy, in other words.

Q. What is the name?

A. Logan B. Emlet.

Q. Who is Mr. Mickelson who is designated as being connected in some way with the Atomic Energy Commission?

A. He is an employee of the Atomic Energy Commission. His assignment is Organization and Personnel. This letter covers a request for approval for merit increases [fol. 371] for these employees, some nine of them.

Q. In other words, before you would make the merit increases in their rate of compensation, you submit a request to the Atomic Energy Commission?

A. Yes.

Q. Is this typical of rather frequent occurrences during the period we are involved in here?

A. Yes.

Q. I turn just one page. It seems to have gotten in the wrong order perhaps in this exhibit, but I turn over just one page in Exhibit C-24, and I find a letter dated June 13, 1956, signed by Oral Rinehart over your typed name, and addressed to Mr. Mickelson.

Who is Oral Rinehart?

A. He is our comptroller who is in charge of the division which we call Finance and Materials.

Q. Of Carbide?

A. Of Carbide.

Q. He is on the Union Carbide payroll?

A. Yes.

Q. This letter seems to recommend for a merit or promotional increase for certain employees. I notice immediately following that a letter dated July 3, 1956, addressed to Union Carbide and consisting of two pages signed by W. R. McCauley, Jr., for Mr. Sapirie, and notice that the same [fol. 372] names or most of the same names—perhaps not all included—which are included in the letter of June 13th, which was the request for increases, appear in the letter of July 3rd. In other words, you notice the first name under ORNL is C. W. Angel on one and C. W. Angel on the other, Baker and then Baker the same way.

A. Yes.

Q. Explain those two communications to us, will you, please.

A. In the one case, in our letter we submit for approval to the Atomic Energy Commission request for merit or promotional increases for certain employees who we consider to be deserving of this.

We cannot put these new salary rates into effect until we have received approval in writing from the Atomic Energy Commission.

After receiving this approval, we put through the changes on our own payroll slips for these people.

Q. And are these rare instances or are the letters, the two letters—the request from Carbide to the Commission and the reply from the Commission to Carbide, these four pages that we are now talking about as a part of Exhibit C-24—are those types of requests and approvals? Or are these rare instances only?

A. These are the usual types of requests of approval [fol. 373] that occur every month.

Q. Does the Atomic Energy Commission sometimes turn down some of these requests?

A. We have had some turned down, yes.

Q. When they turn them down, what do you do?

A. Generally I discuss some questionable ones first and therefore you are not turned down in writing. So the score is 100 per cent, you see.

Q. If they turn them down when you make the request, you don't submit them?

A. Correct.

Q. Then do they get the increase or not?

A. They do not get an increase unless we have an approved request.

Q. The next page after the one we have just been referring to in this Exhibit C-24 is a communication dated September 26, 1956, and this one seems to have been signed by you personally, Clark E. Center.

Would you refer to it and then to the next page, which is the third page of this group, which is a communication dated October 11, 1956, signed by—

A. Wende.

Q. —Wende for Mr. Sapirie, and addressed to Carbide. Talk about those two just a moment, please.

[fol. 374] A. This is a request for an extended work week, to the homogeneous reactor test operations staff. We made a request for an extended work week because we didn't have enough people to cover the work we wanted to do in 40 hours a week, so we must ask for approval for an extended work week. This is the first letter.

The second letter approves the establishment of the 44 hour work week, and authorizes us to continue this for a period of six months.

Q. On this first letter that we were just referring to which was the letter from you to Atomic Energy Commission, I note some handwriting on page 2 of that, and letter "W" signed under it. Would you explain that?

A. Well, the letter which I sent to Mr. Sapirie was apparently handled by Mr. Wende who is his deputy. He then wrote upon the original, "Approval for six months. Then look at it again."

Q. Your request was not limited to six months?

A. No.

Q. The Atomic Energy Commission did what with it then?

A. They approved it for six months with the condition that it be studied at that time so that we could then submit for approval if we needed the extended work week for a longer period.

[fol. 375] Q. You had a while ago a sheet that we put in or we referred to a page of this same exhibit which was for approval of an extended work week for certain individual employees.

A. Yes.

Q. Or, rather, I am in error—it is not individual employees, but it is employees within individual job classifications.

A. Yes.

Q. This one that we are just now talking about is referring to an entire division?

A. Yes, of an operation which happens to be in this case the Oak Ridge National Laboratory.

Q. I notice at the top of this letter, the latter one we have talked about, dated September 26, 1956, the line that says "Extended work week for HRT operation."

What is HRT?

A. Homogeneous reactor test.

Q. That is a division of the operations that you conduct for the Atomic Energy Commission at Oak Ridge?

A. The homogeneous reactor was conceived in a research group. It is a reactor type. It is a new type of reactor. The authorization to work on this reactor was received from the Atomic Energy Commission. The reactor was worked on, finally was planned, the authorization was re-[fol. 376] quested for construction. That was received. Construction was carried out on some portions of the reactor by a subcontractor who was employed by the Atomic Energy Commission. Other parts of the reactor were built in their shops. It was assembled, and this request for an extended work week was for the people to operate the reactor upon its completion.

Q. Probably Mr. Rice and the Court will understand just what we mean by a reactor. We hear a lot about it now, but would you mind explaining briefly, and don't get out of bounds—stay in the ball park—on how far we can go. What is a reactor and what is its function?

A. A reactor is a device in which a controlled nuclear reaction is made to occur. The energy thus released can be used for the generation of steam, which in turn can be used to drive turbines and generators for the production of electricity.

Q. In the course of your work under your contract, do you install reactors in one of the plants at Oak Ridge?

A. The answer is yes, and the answer is no. We have and we haven't. In other words, it depends on whether such work has ever been done before. If it has never been done before, we generally do it the first time. After work becomes more or less normal and custom, then contractors can be engaged to build reactors and to do the work for us.

Q. But under the direction of Atomic Energy Commission [fol. 377] sion you really develop these reactors and make the first installations thereof?

A. Generally, yes sir. When you say "make a reactor," we do not make all the parts. We order parts wherever we can, from industrial firms. We test those, and many times during the course of it we have several scientists, engineers, at the man's factory to see it is put together in accordance with specifications.

Q. Then when you get the parts, whether manufactured by you or Oak Ridge or manufactured by someone else upon your order, what do you do with those parts?

A. Generally inspect them to see whether they are suitable. They are then installed either by us or by contract and then the reactor is tested to see whether it functions in accordance with the design.

Q. Turn two pages, I believe it is, in this same Exhibit C-24 and go to a letter dated January 7, 1957, signed by Oral Rinehart over your name, and addressed to Mr. Sapirie.

It seems again to deal with personnel problems or wages. Would you talk about it just a moment?

A. This is a letter—

Q. Before you start, and in this connection I call your attention to the following page which seems to be a reply under date of January 14th. Will you take those two letters, please.

[fol. 378] A. In this letter of January 7th, Union Carbide Nuclear asked permission to pay a living allowance to one of our employees who was assigned to the York Corporation in York, Pennsylvania, for a period extending beyond 120 days.

In our appendix to our contract we are required to ask not only permission to pay a living allowance in the first place, but at the end of each 120 day period that period must be extended.

Q. By whom?

A. By the Atomic Energy Commission.

Q. I notice this request goes beyond 120 days, and what about the reply from the Atomic Energy Commission to you, which is letter dated January 14, 1957?

A. In the reply from the Atomic Energy Commission the request is granted, and in accordance with our policy of paying living allowance when a man is away from his home base, from his home plant, rather.

We then received approval to continue payment of \$7 per day to this particular employee.

Q. Are those also types of requests and approvals that were made and issued from time to time?

A. Yes, this is a normal procedure.

Q. In the same exhibit I turn over to the third page

from the last of this collective exhibit, and I have a letter dated August 7, 1957. It seems to have been written by [fol. 379] Mr. Vanden Bulck and addressed to Carbide, care of you. It deals with leave of absence, another personnel problem.

State what it is, please.

A. In the letter we request a leave of absence for Dr. R. F. Kimball. Dr. Kimball had been granted a Guggenheim Fellowship. We request approval to pay the difference between the amount of money which would be payable to him under the fellowship on a monthly basis by \$190 per month which would then give him the same amount of money which he had been receiving from us as salary.

Q. And this letter is the approval of that request, is it?

A. Yes, this letter is the approval of a request which we had made to effect this payment.

Q. Is this an unusual occurrence, or is this a procedure frequently followed?

A. This is a procedure frequently followed.

Q. I want to turn to another page in another exhibit, Exhibit C-26, which appears to be page 4 of this collective exhibit. It is a letter dated May 10, 1955, addressed to the Commission, attention of Mr. Moore, and is signed by John F. Fritz on behalf of Carbide & Carbon Chemicals Corporation.

At the time of this letter, May 10, 1955, was Mr. Fritz the purchasing agent for Carbide?

[fol. 380] A. Yes.

Q. Who was Mr. Moore, the addressee or the person to whom this letter is directed?

A. He was the AEC employee responsible for procurement, and contracts, and various other functions, I believe.

Q. I notice that the letter requests approval for negotiating time and material contracts of a certain type and furnishes certain supporting data. Why was that supporting data furnished in connection with that request?

A. Generally when we procure services which are definite in nature, we are able to obtain these services by submitting the request for bid. Many times, however, when we are unable to perform this work in our own shops, we will make a survey of shops in the vicinity.

Q. May I interrupt you just a moment. "Our own shops"

—are you talking about Carbide's shop or shop at Oak Ridge, the ownership of which is in the Government?

A. The shops that we manage for the Atomic Energy Commission.

Q. Now, go ahead.

A. This being an unusual type of contract we indicate our intent and ask for approval to negotiate time and material contracts.

Q. I see you furnish within this letter a great deal of individual data or a large number of items, even to the [fol. 381] extent of showing the number of hours that will be worked on it, and the direct labor cost, overhead and so on. Is that an unusual procedure?

A. No. This is the usual procedure if you wish to make such a time and material contract and negotiate such contract. However, before we do enter into such negotiations we require approval from the Atomic Energy Commission to do this. This is not the usual way that we had materials fabricated. If there is time—

Q. What is the difference between this and the usual way?

A. The usual way is to have a drawing and a set of specifications, submit that for bid to people who can furnish this type of equipment or material.

Q. Now suppose you are using the usual type where you have the set of drawings and specifications and so on, and submit them for bids. What have you done with the Atomic Energy Commission, if anything, before you submit them to outside firms for bids?

A. Well, we have approval from the Atomic Energy Commission to do this type of work. In other words, we have a general overall procedure to proceed on a project. Then under that approval we require materials. We submit these materials and the quantities to bid from vendors.

Q. When those bids come in, what is the procedure that [fol. 382] is followed?

A. The bids are held sealed until the time that it has been previously announced that the bids will be opened. Then the bids are opened, and the award made—no, then evaluated, and then award is made to the lowest bidder or the bidder who more nearly conforms to what has to be

done. A matter of time sometimes determines whether a man gets a bid. Generally, however, it is price.

Q. Suppose they are a cost-type bid or time and material bid that are being submitted similar to the one we referred to a moment ago. What procedure is followed when those bids are received with reference to the Atomic Energy Commission?

A. We always check with the Atomic Energy Commission to see whether entering into such a contract would meet with their approval.

Q. And before awarding the contract under the bids, you get their approval, the Atomic Energy Commission's?

A. We generally have their oral approval. In this particular case, however, we have submitted this in letter form for approval.

Q. Before submitting the bid to bidders?

A. Yes, before negotiating a contract.

Q. We have been dealing for the last little while with procedures in connection with personnel largely. How [fol. 383] ever, some of them get over into the contract field as the last one or two have.

I want to go into this contract field a little more. I want you to turn to Exhibit C-28. I want to turn to a letter dated July 2, 1956, which is a part of collective Exhibit C-28, and which appears to be a letter, a little more than two pages in length, written by you or over your signature by Mr. Rinehart, addressed to the Atomic Energy Commission, attention Mr. Sapirie, and deals with warranty provisions of terms and conditions of purchase orders.

Then I call your attention to another letter in this same collective exhibit, some six pages further on, which I believe is a reply to the letter of July 2nd.

Will you comment on them, please.

A. The letter written to Mr. Sapirie has reference to the warranty provisions of terms and conditions to purchase orders commenting upon the number of exceptions which we have from vendors.

Q. You comment in this letter upon those objections or exceptions and make some suggestions, I believe, on the second page of that letter.

A. Yes.

Q. Now before putting those into effect, did you receive a reply from the Atomic Energy Commission?

A. The second letter is the reply to the letter.
[fol. 384] Q. And the date of that letter is what?

A. November 28, 1956. We received a reply to our suggestions, suggesting that we do not write a blanket change in these warranty provisions, but that each requested change be considered in detail. In other words, what we had asked was not granted.

Q. You were requested to do what in response to your inquiry?

A. To proceed as we had been proceeding, sir.

Q. What did you do?

A. Just that.

Q. Proceeded just as you had before?

A. Yes, sir.

Q. In place of following your suggestions, you followed AEC?

A. Correct.

Q. I show you in Exhibit C-33 a letter dated August 31, 1955, addressed to Union Carbide Nuclear Company, and signed by Ray C. Armstrong, Director of Production Division. Production Division and what is referred to in this letter is Carbide?

A. Of the Atomic Energy Commission.

Q. He was an employee of the Atomic Energy Commission at that time?

A. Yes.

[fol. 385] Q. What is this letter about and method in which we handled it?

A. This refers to a letter which we had previously addressed to the Atomic Energy Commission asking instructions for the disposal of some hafnium oxide.

Q. That is material that is in use out at Oak Ridge at the time?

A. Yes.

Q. It seems to be only 114 pounds of it.

A. 162 pounds.

Q. 162 pounds?

A. Yes. This material had been produced at Oak Ridge, had been sent to another company, and was returned to Oak Ridge. No. Just strike that.

We have requested instructions on how to ship this material and how we should bill the Pittsburgh area office of the Atomic Energy Commission located at Homestead, Pennsylvania, for the material. The letter which we now refer to answers our letter and gives those instructions.

Q. Why didn't you just go ahead and use your judgment on the method of shipment and method of billing rather than going to the Atomic Energy Commission?

A. None of these materials that we produce at the plant belong to us. We have no right to ship them anywhere. We also have no way of knowing how the Atomic Energy Commission [fol. 386] requires them to be shipped, or how you account for the costs of these materials. Since the records that we keep are used by the Atomic Energy Commission for the operation of the Atomic Energy Commission's business, we want to do these things in the way as directed. That is the reason we ask for these directions.

Q. I notice this letter is addressed to J. P. Murray, Y-12 plant superintendent. Y-12 plant is one of the plants operated by you under contract?

A. Yes, sir. J. P. Murray was in charge of that plant. He reports to Mr. Emlet whose name has been mentioned here today before, who is manager of production.

The operations involved are rather vast, and all of these matters could not be handled by myself, and in some cases such as this where it is a routine matter, the Atomic Energy Commission addresses instructions to the various plant superintendents. You will notice here that Mr. Emlet, to whom Mr. Murray is responsible, has received a copy of this letter.

Q. I now call attention to a letter dated December 14, 1958—is it?

A. I think it is '56.

Q. Dated December 14, 1956, consisting of two pages, signed by Herman R. Roth, Director of Research and Development Division, and addressed to the attention of Mr. [fol. 387] J. R. Swartout. Swartout is the same man we referred to a while ago, is he not?

A. Yes.

Q. Who was Roth at this time in December, 1956?

A. He was Director of the Research and Development

Division of the Atomic Energy Commission located in Oak Ridge.

Q. This seems to deal with platinum scrap. What have you to say about this letter?

A. Again since all the materials which we handled are not the corporation's property but are the property of the Atomic Energy Commission, and since this particular material is very valuable, we request instructions on how the platinum scrap should be handled. In this particular case we wanted to know to whom we should ship the platinum and have it decontaminated and put back into purified form.

Q. You said in this, "Since not all the materials are our material." As a matter of fact, none of them are, are they?

A. None are ours. I use my own postage stamps for personal letters.

Q. I call your attention to another letter in the same exhibit, C-33, and which is dated July 10, 1958, which is a page and a half in length, signed by Mr. Wende, and addressed to Carbide, your attention, and it seems to deal with transfer of certain excess property. What do you have [fol. 388] to say about it?

A. This letter asks instructions on how to ship some property which was excess to the needs of the Atomic Energy Commission to the United States Navy. We had requested approval to spend money from our Government contract fund to put this material in crates or prepare it for shipment to the Navy. We were asking authorization to spend that money to transfer the excess property.

Q. Is that typical of procedure followed wherein you were disposing of excess property?

A. Yes.

Q. Belonging to the Atomic Energy Commission located at Oak Ridge?

A. Yes.

Q. I want to pass over to collective Exhibit C-34 about half way through that exhibit, and following the pages of the manual which are part of that exhibit, I see a letter dated April 15, 1955, addressed to Carbide by Mr. Wende. It is about two and a half pages.

A. Prior to receiving this reply, we had written to the Atomic Energy Commission stating that two of the steam

plants located in the Y-12 plant were obsolete and had requested manner of disposition of these obsolete plants.

The letter in answer to that request, dated April 15th, tells us in detail how this material should be handled.

[fol. 389] Q. Did you from time to time during the period involved in this litigation, '55 to '57, and also at other times, have equipment, machinery, and other properties owned by the Atomic Energy Commission which had become obsolete and no longer usable, at least usable to advantage at the Oak Ridge installation?

A. Yes.

Q. Is this procedure outlined here and referred to in this communication similar to procedure followed in such disposition or in the disposition of such obsolete property?

A. Yes, in that we always asked for approval and instructions on how to dispose of this equipment.

Q. Did Carbide handle for the Atomic Energy Commission the disposition of such obsolete property, or did the Atomic Energy Commission itself handle that disposition?

A. Under instructions from the Atomic Energy Commission, we sold the steam plants referred to in the preceding letter. Under similar procedures we dispose of surplus and excess property through a division which we operate for them called Property Sales.

Q. What becomes of the money received? Perhaps I should say who receives the funds from such sales and what disposition is made or use of the money received from such [fol. 390] sales, if you know?

A. It is placed in Government Fund No. 1, I believe. I am not too sure about that.

Q. We will prove it from somebody else.

A. Yes.

Q. I refer now to letter dated April 6, 1956, which is still within collective Exhibit C-34, and ask you what this refers to.

A. In the course of our operations of one of the plants, we generate nickel scrap. This scrap is smelted, placed in the form of ingots. Since these ingots are property of the AEC, we then ask them for instructions on how to dispose of the nickel ingots.

In this particular letter the quantity mentioned is 550,000 pounds.

We are told in the letter how to price this material, where to ship part of it, and what to do with the remainder of it.

Q. Is this typical of other transactions?

A. This is typical of other transactions; yes, sir.

Q. I turn now to a letter dated July 18, 1956, found in and as a part of this collective exhibit a little further on in the exhibit, and is addressed to Carbide by Mr. Sapirie, signed however by Mr. Wende, and to your attention, of Carbide. What have you to say about this one?

[fol. 391] A. This is a letter of instruction requiring us to tabulate and furnish the AEC the amount of steel shapes and structural members that we have on hand which could be used within the Oak Ridge operations. This then would be useful in light of the steel strike which was on at that time.

Q. Passing on, so as not to get too much detail in here, I go to collective Exhibit C-35. I go to page 2 of this collective exhibit. I have a letter dated March 5, 1957, on the stationery of United States Atomic Energy Commission at Oak Ridge, addressed to Union Carbide Nuclear Company, your attention, and signed by Mr. Vanden Bulek for Mr. Sapirie, and ask you to comment on it, please.

A. This is a letter telling us that we are authorized to arrange for shipments of nuclear materials from Richland, Washington, via railway express, and to use the Section 22 Quotation 1-C supplement No. 3 to cover the cost of this shipment. It is a freight rate.

Q. I note a limitation in this authorization as contained in the last sentence. Will you read it, please, into the record for emphasis.

A. Further notifies us that we are not authorized to settle or to adjust claims against a carrier in case of damage or loss of this material.

Q. Is that a rare occasion letter, or is that a type of communication somewhat similar that passed frequently between Mr. Sapirie's office and you or your company?

A. This is a usual type of instruction. Also usual type of letter cautioning us what our authority is with regard to this particular delegation.

(A recess was had.)

Q. Mr. Center, did Carbide in connection with its operations under the contract at Oak Ridge at any time find it necessary or advisable in the course of its work under that contract to purchase any materials of any type from the Union Carbide Corporation itself?

A. Yes. We used materials which are produced not only by other chemical companies but also by Union Carbide.

Q. Now in the event, during this period we are interested in here, you determined it was advisable to purchase materials from Carbide—when I say “you,” I mean Carbide Nuclear at Oak Ridge—what procedure was followed?

A. We would make out a form of the material required, send it on to the AEC. They then know that these materials are produced by Union Carbide. They also know the other vendors of the same materials.

They then would solicit bids, receive the bids, and make the awards. The contract would be made then between the AEC there and Union Carbide. The AEC would then furnish for our operations in Oak Ridge those materials.

Q. You stated that this was handled by the Atomic [fol. 393] Energy Commission. Did the Carbide Nuclear Company at Oak Ridge have anything whatsoever to do with accepting such bids as would be made by Union Carbide?

A. No.

Q. Handled entirely by whom?

A. AEC.

Q. When buying materials of the type in which Carbide itself was not interested, was that same procedure followed or did you people do the buying?

A. We would solicit the bids and make the award.

Q. What is the Linde Air Products Company?

A. Linde Air Products is a division of Union Carbide that produces industrial gases such as argon, xenon, krypton, nitrogen, oxygen.

Q. But it is a division—

A. Of Union Carbide.

Q. —of Union Carbide. Is it in any wise interested out at Oak Ridge?

A. Interested in selling oxygen, nitrogen, and any other product it can sell, yes.

Q. But not in the operation of Oak Ridge?

A. Not in the operation, no, sir.

Q. I hand you a group of papers, I believe there are 34 pages, which purports to be a contract or supplier contract between the Atomic Energy Commission and Linde Air [fol. 394] Products Company and the related documents to that contract which include the check issued in payment therefor, the voucher, a schedule of payments, a list of deliveries and the other papers that are material to that particular transaction. And I believe I have stated that correctly.

A. What is the question?

Q. I was waiting for you to look the papers over. Will you state if this is a group of papers typical of contracts entered into between some division of Carbide and Atomic Energy Commission for the purchase of or procurement of materials at Oak Ridge?

A. Yes, sir.

Q. I will ask you to file this group of papers, 34 in number, as collective Exhibit No. C-37.

(Exhibit No. C-37 was filed.)

Q. What, if any, property did Carbide own that was at Oak Ridge during the period that we are interested in?

A. Union Carbide through its Linde Division owned the equipment which was required to handle the oxygen and nitrogen purchased under this supply contract by the AEC.

Q. Of what did that equipment consist?

A. Consisted of tanks, pumps, heat exchangers, fabricators, valves, some piping and control instruments; also portable tanks for the transfer of liquified gases to various portions of the operation.

[fol. 395]. Q. Aside from these two types of tanks and the piping and so on connected therewith, did Carbide have any other property—I mean Union Carbide Corporation—have any other property that it owned on the Oak Ridge area during this period of time?

A. Yes.

Q. Explain.

A. Union Carbide Corporation furnishes for our use in Oak Ridge eight automobiles. That to my knowledge is the only other property owned by Union Carbide in Oak Ridge.

Q. Did Union Carbide Corporation have any property that it leased from somebody else and had stationed at Oak Ridge during this period of time?

A. Not to my knowledge.

Q. The other property that was at Oak Ridge was either owned by the United States or leased by the United States and used out there by your people?

A. Yes.

Q. That was true of the real estate, of the buildings?

A. Yes.

Q. What about tools and equipment?

A. All owned by AEC.

Q. What about trucks used for transportation out there [fol. 396] and between your divisions or departments?

A. All transportation equipment except the automobiles mentioned are owned by the AEC.

Q. I think I want to go back now to this exhibit we have filed as C-37. In determining whether or not Carbide would be—Union Carbide would be chosen as a bidder for the furnishing of materials manufactured by Carbide, did any of the personnel at Oak Ridge employed by Carbide have anything to do with that determination?

A. No. Other than the filling out of the form which is transmitted to the AEC.

Q. After that form which called for a certain type of equipment or product was submitted to the AEC, what, if anything, did your personnel at Oak Ridge have to do with the order?

A. Nothing to do with the order or procurement.

Q. Are the Government funds which are furnished to Carbide, which you have referred to this morning, reflected in the Carbide Corporation's books as assets?

A. No.

Q. Is any of the property at Oak Ridge with the exception of tanks, pipes connected therewith, and the few automobiles you mentioned taken into consideration as a part of the Carbide Corporation's property in its financial reports or statements?

[fol. 397] A. No.

Q. Then the balance sheets of the Carbide Corporation do not include as assets any of such properties?

A. No.

Q. Any unpaid obligations that many be outstanding for

the work at Oak Ridge are not reflected as liabilities of Carbide in its financial statements?

A. No.

Q. Under this contract Carbide is paid, I believe, a management fee. Is that right?

A. Yes.

Q. Is that fee received by the Carbide Corporation intermingled in any way with the Government funds at Oak Ridge to which we have previously made reference?

A. No.

Q. Where is that fee paid to?

A. Paid to treasury department of Union Carbide Corporation in New York City.

Q. Are there any expenses that may be incurred at Oak Ridge by Carbide which are paid out of its fee or out of Carbide's own funds?

A. Yes, there are.

Q. Would you explain that to us, please.

A. Well, a cost type contract does not cover all costs. For instance, any donations made to Red Cross or to [fol. 398] Community Chest or to any organization is not allowable cost under the contract. Any excess travel expense incurred by employees above the agreed upon expenses which will be paid by the AEC are paid out of corporation funds.

My salary is paid out of the corporation funds. We have a considerable amount of entertainment expense in Oak Ridge inasmuch as we average over 1,000 visitors a month. That is also an unallowable cost which is paid for. Any advertising. Those are all direct costs which are paid by corporation money. There are other items of indirect cost which are incurred in the home office and for which we receive a fee, the fee is intended to cover those things.

Q. When you say for which you receive a fee—that is the one fee that we have referred to which is covered by the contract?

A. Yes.

Q. These other items that you have mentioned, your salary, these entertainment costs, these donations to charity or to charitable organizations, are not paid out of the Government funds but are paid out of your fee or out of Carbide's fee?

A. They are paid with Carbide money. You may say it is paid out of the fee, yes, sir. I don't know.

Q. But they are not paid out of Government funds?

A. That is true. They are not paid for by Government [fol. 399] ment funds.

Q. Records are kept at Oak Ridge by your staff reflecting the various transactions, the cost thereof, and so on. Whose records are those?

A. Those records are AEC records. We do not consider those to belong to us.

Q. Are the original of those records or copies thereof furnished to the New York office?

A. No. Those records are not furnished to New York.

Q. There has been filed in this case as an exhibit the contract between Carbide Corporation and the Atomic Energy Commission which was in force and effect during the period we are especially interested in. I believe the testimony shows that that contract was rewritten in 1955 or 1956.

Are you familiar with the rewriting of that contract in general?

A. In general, yes.

Q. And why it was done, why it was then rewritten?

A. Was to bring up to date all the documents we had prior to that time. Also to reflect, oh, the intent or the relationship of the parties. I mean relationship between the Atomic Energy Commission and the Union Carbide.

Q. Was it because of any change or was there a change made as a result of this rewrite of the contract, or did you continue to operate as you had just immediately before? [fol. 400] A. Our operations continued as it always had. There was no change.

Q. The purpose was so that the wording of the contract would comply with the procedure followed?

A. Yes.

Q. In order to start or commence the present litigation, it was necessary due to the requirements of the Tennessee statutes that the Carbide Corporation make a payment to the State of Tennessee or the then Department of Finance & Taxation, of the amount of money claimed by the State of Tennessee as being owing by Carbide for a given period. The period selected was the month of July, I believe, 1956.

Are you familiar with how the payment of the amount of money herein sued for was made?

A. It was made under the direction of the AEC and from our Government contract Fund No. 1.

Q. Were the directions which were given to you to make such payment given to you in writing?

A. Yes.

Q. Do you have here a photostatic copy of the written authorization and direction given to Carbide by the Atomic Energy Commission to make payment of the amount of \$71,376.36 which is the amount sued for in the present action?

A. This is a copy of the letter which I received direct-[fol. 401] ing us to make this payment.

Q. Will you file that copy as Exhibit C-38.

(Exhibit No. C-38 was filed.)

Q. Following receipt of this communication, did you deliver to your counsel a check for this amount of money?

A. We wrote a check for that amount of money which was forwarded through some means to the State of Tennessee.

Q. From what fund or monies was this check paid or on what bank account was it drawn?

A. On our Government Fund Account No. 1.

Q. Which you have already testified is the money advanced to you by the United States of America in connection with this contract?

A. Yes.

Q. Who establishes, and did during this period we are interested in particularly here, the programs to be carried out in connection with the work you do at Oak Ridge?

A. AEC generally establishes the programs. Sometimes they ask us for suggestions with respect to programs. In general, however, the direction and the extent of the program—the extent of the program rather comes from the AEC and the direction to proceed comes from the AEC.

Q. When you suggest a program, do you start carrying it out before it is submitted and approved by AEC, or explain?

[fol. 402] A. No, sir, we never start anything unless we have approval.

Q. So either they establish it first and submit to you, or you suggest and they approve and then you carry it out?

A. Yes.

Q. Who determines the production rates?

A. AEC.

Q. Is that true of both the intermediate material and the final product?

A. That is all the way through the production line.

Q. All the way through?

A. Yes, sir.

Q. You testified this morning that the feed materials were the materials of the Atomic Energy Commission when received at Oak Ridge.

A. Yes.

Q. As those feed materials move through the various production steps to the final output, does the ownership ever change?

A. No.

Q. Suppose that it is necessary to allocate some of these feed materials between various plants. Who determines such allocation?

A. AEC.

[fol. 403] Q. Do you have any power or authority or attempt to exercise any over the allocation of such feed materials?

A. Only when requested for suggestions by the AEC.

Q. In the course of operation some machinery and equipment undoubtedly becomes obsolescent or for some other reason can no longer be used or properly be used. Who determines the rate of obsolescence or the non-usability of that machinery and equipment?

A. We use the Treasury Department's established method of establishing how fast a thing should be depreciated. However, when machinery doesn't run, we know that it is obsolete. We then notify the AEC and ask them what should be done, can we buy a new one, replace it or repair it, or what can be done.

Q. The determination of what shall be done is made by whom?

A. AEC.

Q. Did you ever have any over capacity of plant there for the requirements given to you by AEC?

A. In some cases, yes.

Q. Who determines what, if any, plant or portion of a plant shall be placed in stand-by?

A. AEC.

Q. You stated this morning that you had been with the Carbide Corporation, or its predecessor in name, for a number of years, some 12 or 14 years prior to going into this particular work, and you had kept up with it more or less since.

Are the procedures followed by Carbide in its own operations for the acquisition of materials and equipment and so on, similar to the procedures followed at Oak Ridge by you?

A. No, they are entirely different.

Mr. Kramer: Cross examine.

Cross examination.

By Mr. Rice:

Q. Mr. Center, you testified earlier in the day as to the scope of Carbide functions at Oak Ridge. I believe I got all these correctly. You defined five general areas in which that operation takes place—the fields of administration, operations, research, development, and engineering.

Did I get all of them right?

A. Yes, sir, I believe that is close.

Q. Now I wish you would, if you will, describe very briefly what is covered under the heading of administration.

A. Industrial relations, accounting, public relations, purchasing, handling of materials which is stores, payroll, surplus property sales. Those are, I believe, the major portions of administration, and, of course, the direction of the [fol. 405] forces to do these things.

Mr. R. R. Kramer: Were you through, Mr. Center with that group?

The Witness: Yes, sir.

By Mr. Rhee:

Q. All right, sir. You have testified generally that AEC and its officials at Oak Ridge maintain a general supervision over your activities. Just how do they supervise the activities in this particular field—the field of administration?

A. Through their contract auditors, they audit various functions that we perform, submit suggestions as to how these things can be performed better.

Q. These are through top-level negotiations, are they not?

A. These people submit a report to the AEC, their findings. Those reports are transmitted to us. These reports in many cases have recommendations as to improvements. We either reply or make comments and our reasons for not wishing to comply. Many times we are told to comply anyway, and we go ahead and do as we are told.

There is also a continuing appraisal of our operations by the staff of Oak Ridge Operations which consists of all the people here and many others in Oak Ridge, who are assigned various functions which they follow very closely.

For instance, their Department of Organization and Personnel [fol. 406] is in close contact and communication with our Director of Industrial Relations, Mr. Vandenberg and Mr. Humphrey, in regard to purchasing and contracts. In other words, there are people in the AEC whose duty it is to follow all of the functions which I mentioned to rate our performance in these various fields:

Q. The relationship, however, between Carbide's officials and AEC's officials is at the supervisory level only, is it not? By that I mean AEC does not supervise the day-to-day operation?

A. No. Any directions which we receive from the AEC are to me or to people immediately reporting to me who I have designated to receive this type of instruction.

Q. But your minor employees and those who actually do the work involved in this operation are answerable only to Carbide officials, are they not?

A. To their own supervision, who are Carbide's employees, yes, sir.

Q. As to your second function there, the function of operations, what briefly is embraced in that?

A. The operation in accordance with the programs set forth with respect to production rates, the type of materials,

which we can make in these plants. I mention the very broad field, radioisotopes being one, stable isotopes; the production of fissionable materials; production of special [fol. 407] ized parts for various parts of the defense program. Our operations embrace all of these things.

Q. Would the same statement hold true with respect to the degree of supervision exercised by AEC there as held with respect to the function of administration about which you just testified?

A. Yes.

Q. The employees in that phase of your operation are employees of Carbide and answerable only to Carbide's officials?

A. Yes.

Q. They work under the supervision of Carbide officials?

A. Yes.

Q. All right, sir. Now as to the field of research, what is embraced in that?

A. The fields of research?

Q. The field of research. You described that as a function.

A. The field of research included research in the matter of chemistry, physics, metallurgy, engineering, nuclear engineering, biology, health physics, waste disposal, reactor concepts, measurement of various physical nuclear constants which are necessary to design various nuclear equipment. That covers, I believe, the major portion of the research.

[fol. 408] Q. The same answer holds true with respect to that function of Carbide at Oak Ridge, that AEC supervises it at the top level and the employees of Carbide are supervised by Carbide employees higher on the ladder than they are?

A. Yes.

Q. Now as to the field of development, what is embraced in that?

A. Development consists mainly of the experiments which lead to the building of small plants for the production of various materials, development of better processes, development of better methods to produce the materials which we are now producing for the AEC.

Q. That operation is in the field of super classification, I take it?

A. Much of it is, yes.

Q. Is that also supervised by AEC at the top level and the actual day-to-day operation carried on by Carbide's own employees?

A. There is day-to-day contact, day-to-day information transmitted to AEC which indicates the levels of operation. Will you read the question?

(The question was read.)

A. (Continuing). At the top level, yes. Day-to-day consultation, direction—indication of which way the AEC feels [fol. 409] the program should go.

Q. Would it be true to say that AEC would keep a closer eye on that particular phase of your operation than it would on others about which we have testified here?

A. No. AEC keeps an eye on every phase of operation.

Q. The degree of supervision is no greater for them than those in the other fields?

A. I would consider it to be about the same. However, some operations are bigger than others and get more attention than others. Some are more difficult and take greater degree of direction about the more difficult things than the routine things which can be covered by the manual or overall instruction.

Q. The last function that you have stated was engineering. What is included within that heading?

A. Oh, the layout of new plants, the layout of a particular machine to perform a certain manufacturing function, the development of an overall plant, say, for a new building from which we can make estimates as requested by the AEC. Things of that nature.

Q. Is that also supervised at the top level by AEC but at the lower working level by Carbide's own supervisory employees?

A. Yes.

[fol. 410] Q. Mr. Center, if you will, please, sir, I would like you to tell us a little something about the organization of Union Carbide Corporation. I take it from what you have said already it has several divisions of which the

Union Carbide Nuclear Company, which is the concern you are connected with at Oak Ridge, is one?

A. Yes, sir.

Q. What are some of the others and what do they do?

A. There is the Industrial Gases Division of which we spoke, the Linde Oxygen Company, making those materials mentioned, the gases. They also make welding equipment. They also supply welding service. They also build plants for the production of oxygen which are placed right in the steel mills. Plants of the same nature for the production of nitrogen. And just recently have completed a plant in California for the production of liquified hydrogen. That is the gases division.

The Carbon Division, which is represented by National Carbon, produces electrodes for electric furnaces. Those are of the largest electrodes. The smallest are for projectors of movie cameras in motion picture houses. Also produces flashlight batteries, batteries for hearing aids, and batteries which were used in the proximity fuse during the war, and many different types of that kind for that kind of equipment.

[fol. 411]. There is the Chemicals Division, which produces over 450 synthetic, organic, allogenetic, and aromatic chemicals. These types of products are only limited by people willing to buy them, the demand for the different kinds of chemicals. In other words, there is a large research program for the development of new chemicals.

The chemical company prides itself that during those years it has brought forth two new chemicals every month for the past 33 years:

Many of these chemicals are used for the production of plastics. Our Plastics Division produces these plastics, such as polyethylene or the vinyls or the Bakelite phenolic types of plastic. Also the epoxy resins.

Our Metals Division produces alloys for use in the steel industry, such as ferro-silicone, ferro-chrome, ferro-vanadium. Produces also many metals such as tungsten, vanadium, molybdenum, copper, and many other much more rare elements such as scandium.

Q. Is that all of the divisions of Union Carbide?

A. There is then a Development Division which studies new processes, makes market analyses which indicates to

Union Carbide fields which it should enter. And the Nuclear Division.

Q. I meant besides the Nuclear Division.

A. Yes.

[fol. 412] Q. I believe I so phrased my question.

How old is the Union Carbide Corporation, Mr. Center?

A. I believe 1920. I am not positive about that.

Q. It has occupied a prominent place in the fields of chemistry and physics since its inception?

A. Yes. We are the originators of the processes that are now known as petro chemicals.

Q. Between the years 1921 and the early '40's, Carbide had acquired a wealth of experience in the fields of chemistry and physics and the development of new products through physical and chemical studies.

A. That is true, yes, sir.

Q. Have you, Mr. Center, been at the site of the Oak Ridge Operations ever since Carbide got into it?

A. During the first 14 months that I was assigned to work on the Manhattan project, I spent approximately half time in Tennessee, the other half being spent in New York City.

Q. I believe you stated on direct that you had been here since 1944 or thereabouts?

A. Yes. I came here and lived in a dormitory January 1, 1944, and moved into my residence in Oak Ridge in April of 1944. So I was permanently located here from January 1st of 1944.

[fol. 413] Q. At the time that Carbide came to Oak Ridge to take the part that it has taken in the development there, did it bring with it a great number of its own employees from its other divisions?

A. We brought in, I believe the exact number was 155 employees of the corporation.

Q. Were they drawn from one particular division or from several divisions?

A. They were drawn throughout the corporation. The major portion of us came from the Chemicals Division.

Q. Now what sort of an experience and qualifications had these people had to the best of your knowledge?

A. The sort of people that we wanted for operations here were those people who had been engaged in the operation of large continuous processes. We were brought here

to operate the diffusion plant. This, I believe, is the largest continuous operating process in the world. It was our duty to put that in operation in Oak Ridge.

Q. Your people were eminently well qualified to do so by reason of their prior experience with Carbide's other divisions?

A. Yes. We brought with us two people who were qualified in accounting procedure and handling of materials. In other words, we brought back down a key organization which is required to keep the accounts to put into operation [fol. 414] a large plant which operates 24 hours a day.

Q. Had Carbide to your knowledge engaged in any nuclear research prior to the advent of the Oak Ridge installation?

A. We had produced uranium as a byproduct of our vanadium operation in Colorado. This was in 1935. We attempted to sell this material and could find only a very limited market and dropped the whole enterprise.

Q. Had any of Carbide's competitors—by Carbide I mean Union Carbide Corporation—had any of their competitors had any similar experience?

A. Vanadium Corporation of America had produced vanadium and had access to the kind of ores from which uranium can be extracted.

Q. Had they pursued it any further than Carbide had?

A. Not to my knowledge.

Q. Did they also drop it upon finding there was no market for it?

A. I don't know if they produced uranium compounds. Actually the only market we could find for uranium compounds was the small sales to the ceramics industry. If you place uranium compounds on the outside of a clear container and fire it, it gives it a beautiful yellow glaze to pottery. That is the only use we could find for it.

[fol. 415] Q. That use, I take it, wasn't sufficient to justify continuing the operation?

A. No, sir. We had two tons of sodium diuranate which had been produced in 1935. We had almost the entire quantity at the advent of the Manhattan District.

Q. Since Union Carbide Corporation has come to Oak Ridge, Mr. Center, has it ever transferred any of its em-

ployees in the Union Carbide Nuclear Company division to the other divisions of Union Carbide Corporation?

A. Yes.

Q. Does that occur frequently?

A. I think the number is approximately 200 who have been transferred from Union Carbide Nuclear from Oak Ridge to other divisions for the same company at other locations.

Q. You mean Union Carbide Nuclear Company?

A. Yes. Private operations.

Q. Now do you continually draw on the other divisions for skilled employees when you need them?

A. Yes. The transfers from Union Carbide's other divisions into Oak Ridge over a similar period I believe numbers around 170. So it is almost at a balance.

To continue on that, we have an arrangement with the AEC wherein we can get consulting services from Union Carbide with their approval; we also can supply consulting services to Union Carbide from Oak Ridge with AEC approval. In the one event Union Carbide bills our operation here. And in the latter case, Oak Ridge Nuclear Company bills the parent corporation for the time of people and expenses incurred. This is also a usual thing.

Q. Can you make those shifts of employees from one division to another of the Union Carbide Corporation without the approval of the AEC?

A. We can. However, if the man is in the upper echelon of our supervision, I always check this with Mr. Sapiric and ask him for comments before we offer these people the opportunity to transfer. In some cases, you know, you cannot control people who want to work in another location. They will solicit a move from people that they know in private enterprise. This has been very low.

We have had people who want to come to Tennessee, which I can appreciate, from such locations as Buffalo or Whiting, Indiana. Some of our people here have been recruited in New York. Some of them have parents and relatives still living in that area; therefore they requested transfer, if there is an opening in our operations, at that location.

Q. In New York?

A. In New York, yes, sir.

Q. But it is not absolutely essential for you to have AEC approval to make a transfer of an individual?

[fol. 417] A. No, but I always feel better if I do have such approval.

Q. Would the security aspect of what they are doing here have anything to do with the necessity or desirability of getting AEC approval?

A. No. The man has committed himself to the security regulations when he is cleared, and this man has been so indoctrinated with these rules and regulations that he will be very careful he does not disclose classified information when he leaves here, whether he goes with Union Carbide or any other group.

I would like to expand, too, on the number of people who have left here. To take a typical year, let's say a year ago, we had 128 technical technically trained people who took jobs with organizations other than Union Carbide. During the same period there were 24 who transferred from us in Oak Ridge to the other divisions of the corporation. So there is a matter which we cannot control, the solicitation of our employees for work with other industry and for teaching in university and things of that nature.

Q. Would you consider it to be a thing of value to Union Carbide Corporation, Mr. Center, to be able to place its employees at the Oak Ridge Operations and leave them for a number of years and then transfer them into some other division?

[fol. 418] A. Yes.

Q. Is experience they gain there a value to Union Carbide Corporation, do you think?

A. That is a value. On the other hand, to gain people from the corporation is just as great a value as the other way. As a matter of fact, there were two people assigned to work in the Oak Ridge National Laboratory from Union Carbide, and this is over the entire period of the contract. I believe we have two people in purchasing. To my knowledge that is the extent of the corporation asking us to train people.

To continue along this line, it is very important in our operation in Oak Ridge and Paducah that we have an outlet for people because the operation has stabilized, and I indicate that it has stabilized. Two years ago we had a total

employment of four plants of about 16,300. At the present time that employment is 15,300.

If we are able to assist the universities in the South to encourage these people to take jobs when they are offered better jobs, we feel that that should be done.

Part of our function in Oak Ridge is to supply trained people to industry for the promotion of nuclear energy. This is also evidenced by the great number of scholarships which the AEC provides for people who are qualified to get training in this subject.

[fol. 419] Q. Does Union Carbide Corporation or Oak Ridge Nuclear Company either one provide those scholarships out of private funds?

A. Yes. We have one at the University of Tennessee in chemical engineering which is provided by the chemicals company and paid for from New York. We have many of these throughout the country.

Q. Is that a standing policy of the Union Carbide Corporation to provide scholarships at various universities for promising students in the field of chemistry and physics?

A. Yes, sir, it is.

Q. You stated on direct examination, Mr. Center, that when you need a piece of major equipment it is cleared through the AEC before any procurement is made. You did so state, did you not?

A. Yes.

Q. What is the procedure with respect to minor equipment or less than major equipment?

A. Equipment which wears out we go ahead and replace.

Q. That is expendable?

A. Yes. And there is a limitation of, a dollar limitation on us with respect to the expenditure we can make on any one purchase.

Q. Do you recall what that limitation is? I know it is in the contract, but just get it in perspective.

[fol. 420] A. I believe presently it is \$100,000.

Q. Is it correct then to say that anything under \$100,000 you can buy without clearance with AEC where it is necessary?

A. If there is money in the contract, if the material is required in the performance of an approved program, yes.

Q. You spoke on direct examination as to negotiations

with representatives of union labor regarding labor contracts.

Do you or representatives of the Nuclear Company bargain with these representatives for union labor, or does AEC bargain with them?

A. In many of these negotiations there are no AEC people. I have been in the hearing of grievances or in the negotiations leading to or consummating in a contract. It is entirely Union Carbide people.

Q. In other words, you negotiate with them respecting the matters of wages, salaries, and working conditions just exactly as a private operation of the Carbide Corporation would in Indiana, let's say?

A. Yes.

Q. It had nothing to do with the Government?

A. One difference, though. After we reach agreement, that agreement is subject to the approval of the Atomic [fol. 421] Energy Commission. And in arriving at a contract, it differs in that way.

Q. But you speak for management and the labor representatives speak for labor, the workers?

A. Yes.

Q. As you stated, Mr. Center, you have been on the scene at Oak Ridge since 1944, or thereabouts. Is the operating relationship of Carbide to the Atomic Energy Commission any different today from what it was in 1947, or whenever it was the AEC was formed and took over?

A. The relationship is still the same.

Q. It is still identical?

A. Yes, sir.

Q. Now we spoke about some changes in the contract effectuated in 1956 for the purpose of clarifying the relation. Would you elaborate on that just a little bit and state just what changes were effected there.

A. When we operated originally for the Army, we had to get approval on everything. And the Army had people stationed out in the plant to work with us at all times. I think that the diffusion plant, which was the only operation we had at that time, had 40 some officers stationed to follow those operations and to tell us what they thought should be done, and we followed their orders completely. It was a much more detailed sort of thing. That is to say

that the contact by and with the Army was a much more [fol. 422] continuous thing than the time I now spend with Mr. Sapirie.

We at that time had only one purpose, was to produce fissionable material to make a bomb.

With the Atomic Energy Commission this is changed. We, too, have been asked in the interim—in 1947 we were asked to operate another plant which is known as the Y-12 plant, and the following year we were asked to operate the Oak Ridge National Laboratory. Subsequent to that time we were asked to assist in the design and make recommendations and help in the expansion of diffusion facilities which led to the plant built in Paducah which we then operated, and also help with the plant at Portsmouth which is operated by another contractor.

With the Atomic Energy Commission things became much more formalized. Records were needed which would permit the Atomic Energy Commission to coordinate its various activities, and therefore any of the records which we had kept which detailed individual items of expenditure and procurement and things of that nature were bought and procured under manuals and much broader methods of instructions.

In that way it became different than during the Manhattan District. However, from the period 1947 of the AEC, the relationship has remained the same.

Mr. Rice: All right. I believe that does it.

[fol. 423] Redirect examination.

By Mr. R. R. Kramer:

Q. When Union Carbide Corporation came to Oak Ridge in 1943 or 1944, did it have any knowledge with reference to the operation of a gaseous diffusion plant?

A. No, sir.

Q. Was there any knowledge with reference to that anywhere in the world that you know of?

A. No, sir.

Q. It was developed by you people and the Atomic Energy Commission?

A. Under the Manhattan District Corps of Engineers, yes, sir.

Q. Something has been said on the cross examination about the day-to-day or frequent exchange of knowledge or working together between Atomic Energy Commission people and the people in the employ of Carbide.

You are working on this what we call the EGCR program?

A. Yes.

Q. What is EGCR?

A. It is experimental gas cooling reactor.

Q. Is it in the development process?

A. Yes.

Q. Tell us about how closely the employees of the [fol. 424] Atomic Energy Commission and members of their staff and employees work with the staff of Carbide and the employees of Carbide and through what echelons of management.

A. We have assigned the work to be done by Carbide employees to Dr. R. A. Charpie. He then is our representative for work on the gas cooled reactor. We, however, only advise with respect to the nuclear feasibility of this particular reactor. We advise also with respect to the fuel elements. It is part of our assignment to develop and assist in the development of the type of fuel elements.

We also check various things such as the adequacy of the pressure vessel that would contain the nuclear reacting materials, the containment vessel, and check anything that the AEC wants checked. In other words, we are working directly for the AEC to assist them in this particular phase of the gas cooled reactor. We will not operate this reactor. However, we will design experiments to be placed in the reactor after it is in operation.

Allis-Chalmers Company is responsible for the nuclear design. And Allis-Chalmers advises the Kaiser Engineers who are responsible for putting the design down on paper so that it can be built by the H. K. Ferguson Company. All these contracts—that is Kaiser Engineers, H. K. Ferguson Company—are directly with the AEC. We as part of our program in reactors assist the AEC in any way that [fol. 425] we are directed. This contact that you mentioned about is very close. AEC is working with our people, and we are working with them.

Q. Is that true even, say, below the job elevation or classification like you and those immediately under you?

A. That is true with respect to Charpie and several of his key people who have various assignments, the fuel element for one, engineering design and the production of a fuel element. Yes. That contact is very close.

However, the AEC people do not direct our people to do anything. In order to do that, we get a letter from the AEC, generally now from a man named Jackson who is the AEC man, A. C. Jackson to Mr. Charpie. I get copies of the correspondence. I get copies of the reply to AEC.

Q. Who is in charge of that design? Is Mr. Jackson or this Mr. Charpie we are talking about?

A. Mr. Jackson is responsible for the AEC.

Q. He is the AEC representative?

A. Yes. Not only design—the procurement, the construction.

Q. At the time that Carbide took over at Oak Ridge National Laboratory and its operation, did you transfer any employees from Carbide anywhere else here?

A. No, but we transferred people from the operations which we then had in Oak Ridge to the Oak Ridge National [fol. 426] Laboratory.

Q. Just from one division out at Oak Ridge to Oak Ridge National Laboratory?

A. Yes. Our operation for the Atomic Energy Commission differs so greatly from anything that the corporation did or now does that the people who have worked with us on the contract here are much more valuable to us. They understand our relation; they understand our limitations, what they are permitted to do and what they are not permitted to do, and it is much easier for us.

In other words, our reservoir of trained men to work in a contract relationship is much greater at Oak Ridge than anywhere else in the corporation.

Q. You, of course, are familiar with the activities now carried on at Y-12, the Y-12 plant, and were when they were commenced?

A. Yes.

Q. Had the Carbide Corporation had any experience with activities of that sort or processes of that sort prior to the time you people started developing the Y-12 area and when you took them over rather from Tennessee Eastman?

A. You mean the group of people which report to me at Oak Ridge?

Q. Yes.

A. No. We had handled materials but we had not carried [fol. 427] ried the fabrication on from that point. However, our original assignment in the Y-12 plant was to run a portion of the original process, and to see whether through engineering and development we could improve it, to compete with what we had been doing and were doing at the diffusion plant. That was the original assignment. That then changed.

Q. Was there any industry experience—any experience in general industry or private industry—similar to what you were carrying out at Y-12?

A. No.

Q. I take it that was true of the original process there when you went in there which Eastman had theretofore followed?

A. The only people who had prior experience was the University of California and Eastman who conceived and operated the plant.

Q. So you succeeded Eastman in taking over this operation?

A. Yes.

Q. But out in private industry over the United States, that process was not known and followed?

A. It was only known as an instrument for the analysis of those materials. It was an instrument—it was not a production process until it was built in Oak Ridge.

Q. Built at Oak Ridge?

[fol. 428] A. Yes.

Q. Take the experience at the Oak Ridge National Laboratory. Had any company in private industry that you know of, including your own, had any experience of that sort prior to the time you took over the laboratory?

A. Well, the people at the laboratory, of course, the DuPont people, who had been trained in that laboratory which was then known as Clinton Laboratories. Clinton Laboratories was a pilot plant for the Manhattan project at Hanford, Washington. So those people had prior experience in what had been developed at University of Chicago and then brought to Oak Ridge. That knowl-

edge then transferred to the State of Washington, Richland.

Q. Richland is one of the Atomic Energy plants?

A. Yes.

Q. So that so far as private industry was concerned, was it using that plan in operating?

A. No.

Q. I asked a minute ago about bringing in any of your people at the Oak Ridge National Laboratory. Did you bring in to Y-12 when you started the operation there any employees of Union Carbide Corporation from anywhere?

A. We transferred people from the diffusion plant to the Y-12 operation.

Q. But that was not from the Oak Ridge corporation? [fol. 429] That was from the Nuclear Division?

A. That was people who had been working under contract with the Atomic Energy Commission, yes, sir.

Q. Aside from those people did you put anybody else in at Y-12 when you took over?

A. Not from Union Carbide Corporation, no, sir.

Q. You did not?

A. No, sir.

Q. Something is said about this matter of people transferred to private industry and training employees there. Are employees or individuals sent there for training to Oak Ridge in these plants that you are operating from other private industry outside of Carbide?

A. Yes, many. We have many people on loan to us from universities, from various other contractors working for the Atomic Energy Commission, and from other industries.

Q. What about this system of scholarships by other private industries in connection with Oak Ridge Operations?

A. Oh, maybe my answer was misleading.

Q. That's all right. I want to follow another tack.

A. Would you repeat the question.

Q. Let me ask the question again. What about other large corporations granting scholarships to employees or to people who are employed at Oak Ridge?

A. I don't know if you would term them as scholar-

[fol. 430] ships. Other companies send their people to us, and they pay them while they are here, and we use these people as our employees to train and work.

Q. Those people are sent by private industry?

A. Yes, sir.

Q. Many or few private industries?

A. Many. The industries who are now engaged in developing and building reactors for private use have sent people here or taken people from us by offering them better jobs.

Q. Carbide also sends some people in for this same type of training and work, does it not?

A. We have sent two people in for training at the Oak Ridge National Laboratory in the operation of reactors.

Q. Is that under a general plan followed by the Atomic Energy Commission, both the Carbide people and people from other private industry who come there for training and work?

A. With respect to our corporation sending people here, we have an agreement with the Atomic Energy Commission that we will permit it up to two people a year. That has been renewed for, I believe in effect five years, and under that agreement we have had two people in here training.

Q. How does that compare with the number of people that other private industries have had in?

[fol. 431] A. This is a very small number of people compared to the others. Those figures are available. I just don't know them.

Q. How are those people paid during the time they are working out there?

A. The people who are from Union Carbide were paid by Union Carbide. And the people who are admitted or sent here for training from other industries are paid by their industry.

Q. They are simply in there for purpose of training?

A. Yes, sir.

Mr. Kramer: That's all.

Recross-examination.

By Mr. Rice:

Q. Is the present concern at Oak Ridge, the Union Carbide Nuclear Company, the successor to Carbide & Carbon Chemicals Corporation?

A. We are successor to the Chemicals Division who was the successor of the Carbide & Carbon Chemicals Company which formerly was Carbide & Carbon Chemicals Corporation, which was a subsidiary of Union Carbide & Carbon Corporation. I think it is all in the record.

Q. I am sure it is.

Mr. Kramer: I think it is, too.

A. You had it. It dates I believe from 1956.
[fol. 432] Mr. Rice: All right, sir. You don't need to elaborate any further on that. That's all.

[fol. 433] R. R. KRAMER, being first duly sworn, was examined and deposed as follows:

Direct examination:

The Witness: In the answer filed in this case on behalf of the defendant, there is a statement found in Section XII thereof to the effect that the complainants in the present suit had, by reason of a prior course of conduct, evidenced clearly an admission that a taxable privilege under the Tennessee statutes had been engaged in by Carbide in connection with its work under the contract under which it is presently operating at the Oak Ridge installation.

[fol. 434] Specific reference is made in this section of the answer to the fact that something like a year before the institution of the present litigation there had been made to the Department of Finance & Taxation nearly \$200,000 in sales and use taxes for the period of time between the repeal of Section 9-B of the Atomic Energy Act in 1953 and the effective date of an amendment to the Tennessee Sales and Use Tax which effective date was April 30th or May 1st, 1955.

A somewhat similar statement is found in another section of the answer.

Inasmuch as I personally handled a great deal of the negotiations leading up to the 1957 settlement which is referred to in the language I have just made mention of, I feel that I should make an explanation.

Section 9-B of the original Atomic Energy Act provided that the Atomic Energy Commission and the property, activities, and income of the Commission were expressly exempted from taxation in any manner or form by any state.

This section of the Atomic Energy Act was repealed by an Act of Congress which took effect on October 1, 1953.

After the effective date of this repeal by Congress, the State of Tennessee asserted the right to collect sales and use taxes from Union Carbide Corporation and certain [fol. 435] other contractors operating in the Oak Ridge area.

Our law firm was employed by these contractors with the approval of the Atomic Energy Commission to represent them in discussions and in any litigation that might grow out of this question.

Resulting from this employment a number of conferences were had with representatives of the State Department of Finance & Taxation and with the Honorable Allison B. Humphreys, and in some of which the Honorable Milton P. Rice participated, the latter gentleman representing the office of the Attorney General of the State of Tennessee.

At most of these conferences Mr. Herrell from the Sales Tax Division of the Department of Finance & Taxation was present, and the Honorable Z. D. Adkins, the then Commissioner, was present at some of them.

It was the position of Atomic Energy Commission and of these contractors that they were not liable for any sales or use tax in connection with their purchases, receipt, use and storage of the materials referred to in the Tennessee Sales and Use Tax Act.

The State, by special counsel, had instituted a number of lawsuits in the Circuit Courts of Davidson County in December, 1954, seeking to collect certain privilege taxes from a number of contractors on the Oak Ridge area. These [fol. 436] privilege taxes were of the nature that the Su-

preme Court of Tennessee in the second Roane-Anderson case held were not collectible from Roane-Anderson Company.

At a conference held in the office, as I recall the place, of General Humphreys, in Nashville, in December, 1956, definite plans for compromise of all this pending tax litigation was discussed. At that time General Humphreys stated that he would take the entire matter of these tax questions and pending tax suits up with Commissioner Adkins and would advise us later of whether or not a proposition for settlement which had been generally worked out at that meeting would be acceptable to the State.

It was very definitely understood by myself and I believe by all others who were present in that meeting on behalf of the contractors and the Atomic Energy Commission that any settlement then worked out would be without prejudice to the rights of either party in any future litigation.

The proposed settlement contained concessions by the State of Tennessee with reference to the amount of tax claimed, and a proposed concession on the part of the Atomic Energy Commission, and through it by the contractors involved, with reference to the payment of some monies.

On March 4, 1957, following the meeting in December of 1956, I received from General Humphreys, representing [fol. 437] the State of Tennessee, a communication setting forth somewhat in detail the plans for compromise and settlement which we had discussed in his office some two months prior thereto.

And I want to file a photostatic copy as Exhibit C-39. I have handed the original to General Rice for his examination.

(Exhibit No. C-39 was filed.)

The Witness: Under this proposed plan for a settlement, all questions with reference to the liability of these contractors, including Carbide, under Tennessee Sales and Use Tax statutes for purchases, use and storage of materials at Oak Ridge during the period from October 1, 1953, through April 30, 1955, were to be disposed of. And, as will be noted from the letter, Union Carbide and the other contractors had kept records setting forth the amount of

sales tax which would be due for this period from each of them under the Act.

This settlement was accepted by the Atomic Energy Commission and by the contractors, and pursuant thereto, in order to protect the rights of all parties, a suit was instituted in the Chancery Court of Davidson County by the State of Tennessee on relation of the Commissioner of Finance & Taxation, and the Attorney General of the State of Tennessee, against the Union Carbide Corporation and [fol. 438] the other contractors at Oak Ridge who had been involved in the discussions, this case bearing No. 79,109 on the Rule Docket of the Chancery Court.

Pursuant to the agreement which was had between General Humphreys and the witness, I personally prepared the bill for filing in the Chancery Court, the answer to be filed thereto, and the judgment which was to be entered on this case. Copies of these papers as drafted were submitted by this witness to General Humphreys under date of June 22, 1957, as shown by our office copy of my communication.

It is my recollection that General Humphreys approved these papers as drafted, and on June 26, 1957, the original bill as thus prepared, and the answer of Union Carbide Corporation, were filed in the Chancery Court of Davidson County, Part I.

The situation and all the facts surrounding it were fully explained to the Chancellor; and thereupon the final decree was entered.

Copies of the original bill as thus filed on June 26, 1957, the answer filed on the same date, and the final decree as entered, are filed herewith as collective Exhibit C-40.

(Exhibit C-40 was filed.)

The Witness: The amount awarded in this decree as against the present complainant, Union Carbide Corporation, [fol. 439] was \$197,975.04.

The original bill, as will be seen, names a number of the other corporations operating at Oak Ridge also as defendants, and judgments were awarded against them in various amounts, the total amount of the judgment as awarded in the case being \$413,755.53.

On July 1, 1957, the amount of this judgment was paid

through our office to Mr. Kenneth R. Herrell, Director of Sales Tax Division of the Department of Finance & Taxation, State of Tennessee, by check No. 4336, dated June 28, 1957, drawn by C. A. Wood, Regional Disbursing Officer, on the Treasury of the United States.

No part of this judgment, either insofar as it affects Union Carbide Corporation or the other defendants, was paid by the contractors, either out of their own funds or out of the monies advanced to them by the Atomic Energy Commission for expenditure in their operations.

At the time of the delivery to Mr. Herrell of the check for \$413,755.53, Mr. Herrell executed the Atomic Energy Commission Public Voucher for the same amount, certifying that this amount is correct and just and that payment had been received.

Copy of this voucher is also filed herewith and being identified as Exhibit C-41.

(Exhibit No. C-41 was filed.)

[fol. 440] The Witness: At the same time that the voucher was signed by Mr. Herrell, he executed and delivered to the witness a receipt acknowledging that he had received payment of this amount in full.

A copy of the receipt executed by Mr. Herrell is filed as Exhibit C-42.

(Exhibit No. C-42 was filed.)

The Witness: In the course of the conferences which were held, and at most of which Mr. David Oakley, Jr. was present as one of the representatives of the Atomic Energy Commission, it was the custom of Mr. Oakley to keep a notation setting forth rather fully the discussions which occurred. In his personal notes on a conference had on October 12, 1956, in which this question of settlement was discussed, Mr. Oakley has noted a statement by Mr. Humphreys that the State had no intention to use any admissions made in connection with this settlement as prejudicial to any party in any new or additional litigation.

It was very definitely the opinion of this witness that this settlement and the payment of the money by the Federal Government on the judgment awarded would not be used to the advantage or prejudice of either the State of

Tennessee, the Atomic Energy Commission, or any of the corporations involved.

For the purpose of working out a settlement between [fol. 441] the parties, we agreed to pay sales tax or money which was claimed as sales tax, and the State agreed to waive any claim for use tax or money claimed as use tax for the period involved, and it was on this basis that this settlement was made and this money paid.

I had personally gone far enough to assure the Department of Justice of the Federal Government that effectuating this settlement of this tax dispute for the period from October, 1953, to April 30, 1955, would not prejudice the rights of the Government, the Atomic Energy Commission, or the contractor in connection with claims asserted by the State for sales or use tax against the contractors at Oak Ridge for any period subsequent to April 30, 1955.

Had I realized that this settlement and this payment from the Treasury Department would have been used by the State of Tennessee as a precedent or as a claimed admission by either the contractors or the Atomic Energy Commission, I would not have entered into such settlement nor authorized such payment.

Cross examine,

Cross-examination.

By Mr. Rice:

Q. I have just one question I would like to ask, Mr. Kramer. You have testified, Mr. Kramer, regarding payment of some \$400,000 following a conference in December [fols. 442-443] of 1956, by the Atomic Energy Commission in satisfaction of claims against several contractors.

Did General Humphreys ever state the agreement, about which you have testified, in writing to you?

A. I was under the impression that it was in both letters by me to him and him to me, but a thorough search of our files has failed to disclose any such letter.

Mr. Rice: All right, sir.

And Further This Deponent Saith Not.

[fol. 95] IN THE CHANCERY COURT PART I FOR DAVIDSON
COUNTY, TENNESSEE

No. 80,061

THE UNITED STATES OF AMERICA and THE H. K. FERGUSON
COMPANY, Complainants,

vs.

B. J. BOYD, COMMISSIONER OF FINANCE & TAXATION OF THE
STATE OF TENNESSEE, Defendant

Excerpts from Testimony

[fol. 96] APPEARANCES:

For Complainants: R. R. Kramer, Jackson C. Kramer,
On behalf of The H. K. Ferguson Company. O. S. Heistand,
Jr., David L. Oakley, On behalf of Atomic Energy Commis-
sion.

For Defendant: Milton P. Rice, Assistant Attorney Gen-
eral, State of Tennessee.

[fol. 97] CHARLES VANDEN BULCK, being first duly sworn,
was examined and deposed as follows:

Direct examination.

By Mr. R. R. Kramer:

Q. Mr. Vanden Bulck, you have heretofore testified in
the case of United States of America and Union Carbide
against Boyd, Commissioner, etc.?

A. I have.

Q. In that deposition you gave the history of your back-
ground and your connection with the Oak Ridge project,
and I assume that what you said there was correct, so I am
not going back into it again.

A. Yes, sir.

Q. Are you familiar with the operations conducted at
Oak Ridge by The H. K. Ferguson Company?

A. Yes, sir.

Q. You have been at Oak Ridge during all of the period of time that H. K. Ferguson has been operating there?

A. I have.

Q. Do you have here a copy of the contract as entered into between H. K. Ferguson and the United States of America through the United States Atomic Energy Commission?

A. I do.

Q. I show you here a group of papers tied together in a binder which is identified as Contract No. AT-(40-1)-2014 [fol. 98] and ask you if this folder does contain the original contract or a copy of the original contract as entered into between Ferguson and the Atomic Energy Commission?

A. Yes, sir, it does.

Q. I notice that attached to and bound in with this contract itself there are a number of additional papers identified as modifications thereof, some of which however are listed as supplements rather than modifications, but they carry with them consecutive numbers running through Modification No. 10.

Have you heretofore examined these papers and can you state whether or not these include the entire contract as it existed in November, 1956?

A. Yes.

Q. And the purpose of including in this bound group of papers these modifications, some of which are designated supplements, was to give the entire picture of the contract as it exists during the month of November, 1956?

A. That is correct.

Q. I am going to ask you to file this group of papers bound in this one folder as Exhibit F-1.

(Exhibit No. F-1 was filed.)

(Discussion was had off the record.)

By Mr. R. R. Kramer.

Q. My attention has just been called to the fact that a number of these modifications which include Modifications [fol. 99] 6, 7, 8, 9, and 10, are all dated subsequent to November, 1956. Why do you include those in this group?

A. They are dated subsequent to the November date

by reason of the fact that they incorporate into the contract officially the instructions that have been previously given to Ferguson to proceed with certain miscellaneous construction work. The miscellaneous construction work had been ordered prior to the September date, September, 1957, date.

This is the method which is provided for in the basic contract which is in this exhibit, which states that periodically, certainly not less frequently than every six months, we will amend the contract and bring it up to date to include in it the work that has been ordered to be performed by Ferguson.

Q. In other words, work may be ordered to be performed and be performed by Ferguson under the original agreement prior to the time that the modification is actually dated and delivered?

A. This is correct, sir. The Ferguson construction company is there, primarily there to do miscellaneous construction work. That is the purpose for which they were hired, and if you will examine these modifications, you will note that they include a great number of small jobs which have been previously authorized in writing, but in order not to make the contract too voluminous, [fol. 100] we periodically include them into the contract in a modification.

Q. Before I go into a discussion of the contract and what it covers, will you state for the record how this contract was negotiated and under what circumstances it was entered into.

A. I think it is necessary to give you a little background history on this score. Historically we have had some very large building programs at Oak Ridge. And each time that we engaged in one of these programs we had a major construction contractor on a cost plus a fixed fee basis doing the major job. During the time that this contractor was on the area, he then also took care of the miscellaneous construction work.

Along about the beginning of 1955, we ran out of major construction items, and we recognized that it was necessary to get into Oak Ridge a construction contractor who would take care of just the miscellaneous work.

The Commission determined that it would solicit pro-

posals from a number of construction contractors to select one for the purpose of doing this miscellaneous work, and this is how we came to negotiate a contract with Ferguson.

Q. Was a written communication or request made for proposals—by the Atomic Energy Commission, for proposals for a contract of this type?

[fol. 101] A. Yes, sir, we prepared a data sheet which generally set out what our intent was, and submitted this to a number of construction contractors. And I believe I have a list of the firms from whom we solicited proposals here:

Q. Do you have in front of you a sheet which covers the type of solicitation you made?

A. Yes, I do. This is the particular solicitation that was made of The H. K. Ferguson Company and has attached to it data sheet for the purpose of enlisting their interest, to give a description of what we had in mind, and on which basis they prepared a proposal and submitted it to the Atomic Energy Commission for consideration.

Q. Is this similar to the type of solicitation you made to the other contractors?

A. For this particular purpose, yes, sir.

Q. Will you file this proposal, or solicitation rather, as collective Exhibit F-2.

(Exhibit No. F-2 was filed.)

Q. Do you have present, Mr. Vanden Bulek, a list of the firms to whom you submitted invitations for construction services?

A. Yes, sir.

Q. Do you have a copy of that list in your hand?

A. I do.

Q. Will you file that, please, as Exhibit F-3.

[fol. 102] (Exhibit No. F-3 was filed.)

Q. I notice that The H. K. Ferguson Company is the fourth firm listed in the left-hand column on this page.

A. That is correct. This is an alphabetical listing, so that the fact that they are fourth has no significance.

Q. There is on this listing which is Exhibit F-3 some indication of footnotes. For instance, in the front of a

number of these is the figure 1. The footnote there is self-explanatory, is it?

A. Yes, sir. The list is a list of the total number of invitations that we attempted to receive proposals on. And as you will note, the list indicates by the small numeral 1 the firms which actually submitted proposals to our request.

Q. And the others, while they received invitations to submit proposals, did not reply or did not submit proposals?

A. That is right, sir. They either were not interested in this type of a contract or they were so loaded up with work they couldn't accept it. Maybe the fee was not attractive to them. Any one of a number of reasons. But they did not submit proposals.

Q. According to this list, some of these concerns submitted a joint venture proposal?

A. That is correct, sir. The scope of work that was required [fol. 103] to be performed was so broad in the character of the work to be done, it was necessary for some of these firms to join together in a joint venture in order to provide the necessary construction technology to be able to handle any type of work to be done.

Q. On the proposals that were submitted, what action was taken by the Commission?

A. The proposals were evaluated by a contract board established by the Atomic Energy Commission, and a selection was made by the Commission, and then a contract was negotiated.

Q. The selection as made was of The H. K. Ferguson Company?

A. That is correct, sir.

Q. After that selection you say there was negotiation with Ferguson and its contract was executed?

A. That is right.

Q. Briefly will you explain this contract. While we have it in written form, which is controlling, but will you explain briefly what it is and what it covers, what functions are to be performed, under it.

A. The basic contract did not describe the work to be performed. It could not because not even the Commission knew what was to be done at that time. But it did, as indicated in the data sheet that was submitted to the contractor, [fol. 104] contemplate that a certain dollar volume of work

would be done each year, and the scope of the actual work to be performed was added to the contract by the subsequent modifications.

Q. The general description of the work that was to be performed, I believe, is set forth in the paragraphs numbered 2 and 4 of the data sheet which was attached to the request for proposals?

A. These are merely examples of the type of work we are talking about which would be performed under this contract. I believe that these were work that might have already been performed prior to our solicitation of the proposal. But we merely give this as an example in order that the construction contractor would be able to get together the necessary skills to do the work that is required.

While these are shown in here as examples, they are not necessarily the work that was performed by Ferguson.

Q. Is there in the contract, and, if so, where in the contract, Exhibit F-1, a statement of the volume of work that was to be performed under this agreement?

A. No, sir, there is not a statement of the volume of work in the contract. It merely indicates that from time to time Ferguson will receive directives for performing certain work and that the scope of the work will then be detailed in further modifications.

[fol. 105] Q. In the original contract there is a dollar value of the work to be performed, I believe, is there not?

A. In the data sheet which we submitted to the contractors for their consideration, we have indicated a range of dollar volume per year for a three year period, and have extended out alongside of that the approximate fee that we would pay.

However, there is no guarantee that we will ever reach these dollar amounts, or either be over or under them. But they are just merely indicative of a range.

Q. And was the amount of those dollar amounts modified from time to time by the supplements or amendments to the agreement?

A. The amounts were actually established by the supplements and agreements that were added to the contract subsequently.

Q. Would you briefly please tell us what the work con-

sists of that Ferguson has been and is performing under this agreement and the general nature of it and so on.

A. They are minor construction jobs that we need to have performed during the course of the year but which cannot be foreseen with any great degree of accuracy. We know from general experience in operating these large plants that a certain amount of construction work must be performed each year. And the actual detail of it, the individual jobs, is established in the various modifications to the basic contract that have been issued from time to time.

Q. What would you, or in what manner rather would you describe the term minor construction work as you have used it here?

A. That would be any construction job over \$2,000 and in the upper range might be as high as \$1,000,000. But generally it is the type of work that does not lend itself to the preparation of detailed specifications and invitations to bid, which must be performed very quickly, that we have engaged Ferguson to do.

Our policy normally is to go out and obtain sealed bids and make award to the lowest responsible bidder, but this is only practical if you have available detailed specifications and plans.

The type of work that is covered here is not in that category.

Q. In other words, the details, plans, drawings, and so on, could not be available prior to the beginning of construction as a rule and had to be developed as construction progressed?

A. This is right. And you must remember generally the Commission obtains its detailed designs under contracts with architect engineers. In some of those small jobs it is just not practical to go through the process of selecting an architect engineer and subsequently advertising for bids, because the jobs aren't of a size that would get any interest in the construction field.

Q. Is any part of the work that Ferguson does under this contract what you might call alteration work?

A. Yes, sir.

Q. Explain somewhat. Is it buildings or processing equipment or what is it?

A. It would be in the structures themselves. They might find it necessary to put in new floors. They might find it necessary to take out partitions, or rearrange those masonry partitions or other types. They might find it necessary to install certain shielding requirements or face walls with certain types of material that would permit us to decontaminate the rooms in which the work is performed readily.

It is just the sort of work that comes up from time to time when you operate a large plant.

Q. Does it touch, or is there included within it, and have they been required to do under this contract, any work in connection with laboratory installations, and so on?

A. Yes, if the work to be performed is of a construction nature, Ferguson would then get a directive from the Director of the Area Construction Division and proceed with the work, the construction work, which may be putting in foundations for new equipment, and the actual installation [fol. 108] of the equipment, and in most cases on these small jobs the equipment would be furnished by the operating contractor, and they would merely perform the construction labor essential to its installation.

Q. How closely related in area is the work done by Ferguson with the operations of Carbide?

A. They perform all of this miscellaneous type of construction work for Carbide in all three of the plants located at Oak Ridge. In addition, they will also from time to time be directed to perform work for the Oak Ridge Institute of Nuclear Studies which operates some Commission facilities at Oak Ridge.

And they have also in the past performed work for the facilities operated by the University of Tennessee in its research program at Oak Ridge.

In fact, at one time we found it necessary to ask Ferguson to undertake to do some work at Portsmouth, Ohio, for us in the gaseous diffusion plant that is located there.

Q. Was that done under this same contract?

A. Yes, sir, that was done by directive under this contract.

Q. How closely is it necessary to schedule the work to be performed under this contract with the operations being carried out by Carbide?

[fol. 109] A. This is very, very closely coordinated with the operating contractor since we, Ferguson, and the operator naturally are interested in interrupting the operations for as brief a period as possible. And the times for doing things are actually directed by the operating contractor since he is responsible for operations.

Q. And the operating contractor is Carbide?

A. Yes, sir. Or it may be one of these others that I mentioned before.

Q. A portion or substantial amount of the work performed by Carbide is within the so-called secret area, is it not?

A. Yes.

Q. How does Ferguson fit into that situation?

A. There are certain portions of the plant that are where restricted work is performed, secret work, classified work; and access to those areas is only possible after the Atomic Energy Commission has granted proper security clearance.

There are a number of Ferguson employees who have been so cleared, and we attempt to utilize those individuals in connection with any work in these restricted areas.

Q. In the work assigned to Ferguson and under which or for the performance of which directives are given, is it as a rule for a detailed, completed piece of work, or are [fol. 110] specifications and plans changed frequently on this work from day to day?

A. Specifications and plans are changed frequently. If it is possible to obtain completed plans and specifications, the job is advertised, and we invite sealed bids for doing the work on a lump sum or unit price basis. This may be done either by Carbide or by AEC. But it only the—

Q. Ferguson would not be in on that work?

A. No, sir. It is only the miscellaneous type of work which doesn't lend itself to that treatment and which usually is required to be done on a hurry-up schedule that is included for assignment to Ferguson.

Q. Is there any work which that after Ferguson has partially completed it, it is necessary to change plans and re-do what has previously been done?

A. Yes. Frequently in these jobs, these miscellaneous jobs, because of the lack of detailed specifications and plans, we find that changes are necessary and actually incorpo-

rated afterwards which may in some instances require removal of some of the work that has been done, but I think this is very rare, but it certainly will change what you started out with initially and what you finally complete.

Q. What about the renovation of buildings, alterations of buildings, and so on, already existing? Is that as a rule left to lump sum contracts, or is that the type of work [fol. 111] that is being done by Ferguson?

A. It depends entirely on how large the job is. If it is a great big job that lends itself to advertising and award on the sealed bid basis, then, of course, it would not go to Ferguson.

If it is in a restricted area where there are limitations on the period of access to the facility, and has to be done on a scheduled basis, we then would assign it to Ferguson.

Q. You are not the representative of the Atomic Energy Commission that personally supervises in detail the work performed by Ferguson, are you?

A. No, sir, I am not.

Q. Who does do that? Who is in charge?

A. William Bonnet, who is the Director of the Area Construction Division at Oak Ridge.

Q. Mr. Bonnet, I believe, has been called or sent by the Commission to the west coast at the moment, has he not?

A. That is right.

Q. Earlier this morning you made some mention of planning letters, I believe you called them, which were issued from time to time by the Atomic Energy Commission to Ferguson for work that is being done under this contract.

Will you explain how that procedure functions.

A. Mr. Bonnet, the director, is the one that issues [fol. 112] the letters requesting Ferguson to prepare an estimate for the work to be performed. And this estimate is then reviewed, and if they agree on the estimated cost, they are then directed to proceed with the work.

Q. In its work under this contract, is Ferguson what [fol. 113] we have described in the Carbide case as a management or integrated contractor?

A. They are by the terms of the contract a management and integrated contractor of the Commission.

Q. How is the expense for carrying out the work done by Ferguson taken care of?

A. They do not use their own funds. All funds for the work are advanced by the Commission. They are deposited in bank accounts that are identified as Government bank accounts, and their expenditures of these funds are audited by an internal audit team of Ferguson's and subsequently checked by the Atomic Energy Commission audit force.

Q. Ferguson I believe is a construction contractor operating in fields aside from its Oak Ridge contract, is it not?

A. Yes, sir.

Q. What about its record of accounting operations for the work performed under this contract with reference to their other accounting records or records for its other work?

A. They are required to maintain a completely separate set of records that are not comingled in the corporate records. In this respect they are really keeping the records for the Atomic Energy Commission, and we treat them—we have a relationship sort of as a branch office to a [fol. 114] headquarters office. They maintain the details, and we merely summarize the accounts by totals. But those are the Atomic Energy Commission's records.

Q. And are those records maintained required to be maintained in accordance with the AEC requirements and standards?

A. They are. We have prescribed the accounts for them to be used. We agree on the classification of these accounts. And this is part of the Atomic Energy Commission, the AEC Manual which this particular chapter covering construction accounting I believe was introduced in my previous testimony in the Carbide case.

Q. Will you explain to us briefly how the budgeting for the expenses incurred in performance of the Ferguson contract are handled.

A. The construction contractor does not prepare budgets in the manner that one of the Commission's operating contractors prepares its budget.

Q. So that in this respect it is different from Carbide?

A. It is different from Carbide in this respect.

Q. Go ahead and explain how its funds are handled.

A. The funds for doing construction work are appro-

priated by Congress in a separate appropriation called plant acquisitions and construction appropriation. The [fol. 115] basis for the estimates for the request for those funds comes from two sources. One, the operating contractor may include in his budget that he submits to the Commission annually an item called general plants projects. This is the purpose of this title and covers for the miscellaneous construction work that as I explained briefly has been our experience over the years and is just a requirement.

In addition to these general plants projects, the Commission may include a line item of construction which is any construction job over \$500,000. These line items and general plants projects first go to the committee that reviews them and authorizes them for inclusion in the appropriation, subsequent to which the appropriation committee then passes on them and appropriates the funds.

The Commission general plants projects funds are allotted to it in one total sum, and the Commission allocates these sums to its various operations offices and to its various operating contractors in their financial plans.

However, with regard to Ferguson, we do not give them a financial plan as such. Whenever they are authorized to proceed with any construction work, the funds are ear-marked, whether they be in the hands of the operating contractor or retained by the Oak Ridge Operations Office, and are added to the contract in the form of an amendment that is done periodically, and the obligation increased thereby, making the funds available to do the work.

[fol. 116] Q. That is an amendment to the—

A. Ferguson contract.

•Q. —Ferguson contract. All right.

A. The construction appropriation generally on a line item includes the entire amount required to construct this added facility. And the funds are made available in total, and at the time we assign such a project to Ferguson the contract is then amended to include that total amount of money that they will require to fill the job.

This is different from what we do in our operating contracts in that they are limited to funds for one year's operation. But in the cases of a construction job which

may extend over two or three years, such as one that we have currently underway, the entire amount of money is put into the construction contract and the appropriation is available until expended.

Q. When a directive is given to Ferguson to do some particular piece of work, construction or alteration or something of that sort for which the funds come from the general plants projects fund, you say that that amount of money is immediately transferred to what account? And from what account?

A. The general plants projects funds are in the hands of the operating contractor. Whenever the Ferguson company is required to perform one of these miscellaneous construction jobs that is to be funded from these [fol. 117] general plants funds, then the costs of doing that work are accumulated by Ferguson and transferred to the operating contractor through the AEC current account. And the operating contractor then includes that in its operations for the year.

Q. Do you mean by that that money is transferred from the operating contractor, Carbide, to Ferguson?

A. Not necessarily, no.

Q. Then explain what you do mean.

A. It is merely an accounting transfer, and we authorize the expenditure of funds by Ferguson. We have increased our obligation to do this, and then transfer the cost to the operating contractor through the AEC current account.

The net effect of this is, of course, to—let's see if I can follow this thing through. The net effect is that no cash changes hands. But the costs are transferred, and since Carbide as the operating contractor doesn't expend the cash, that is the costs have been allocated to it under the general plants projects, it is then available for Ferguson to spend in this manner.

Q. The expenses of this work done by Ferguson has to be paid for in cash. Where does the money come from?

A. This is right, sir. I think you must remember that we operate on what is known as a cost type budget as [fol. 118] opposed to an expenditure and obligation type budget. And that while we may give Carbide a cost ceiling, that does not necessarily mean that we give them the cash. In other words, they have a cost ceiling for general plants

projects which performed entirely by Ferguson doesn't require any funds on their part. And the funds are made available to Ferguson but the cost is part of the Carbide contract.

Q. Then the funds are handed over to Ferguson from or by the AEC?

A. That is correct.

Q. And in place of Carbide receiving that amount of money which was included in their projects, it is paid to Ferguson for fulfilling of the Ferguson work?

A. That is right. They need those funds to carry on the work and are given to them on a weekly estimate of their fund requirements.

Q. How are the funds that are made available to Ferguson handled?

A. They are deposited in bank accounts that have been approved by the Treasury Department as recipients for Government funds.

Q. What bank if you know—maybe we had better get it from Ferguson—is used by Ferguson which has been designated by the Treasury Department as a banking institution or as a general depository for Federal funds?

[fol. 119] A. The Hamilton National Bank.

Q. There was filed as Exhibit No. C-21 in the Carbide proof a letter of such designation. I show you that letter and ask you if that is what you are referring to at the moment?

A. Yes, sir. This is an approval by the Treasury Department approving the Hamilton National Bank of Knoxville as a general depository for Government funds. The contractor selects the bank. He submits this information to the Atomic Energy Commission, and then we through our channels obtain this authorization.

(Whereupon, at 11:45 o'clock a.m., a recess was had until 1:00 o'clock p.m.)

Q. Mr. Vanden Bulck, what does the Atomic Energy Commission have to do with the establishment of the policies or procedures for accounting and auditing that Ferguson follows in its operation at Oak Ridge?

A. The Atomic Energy Commission governs all of its

operations through the AEC Manual which is a series of issuances that establish policy and detailed procedure.

The Commission has decreed that these policies and procedures be followed by its management contractors, and in this particular case the procedures are prescribed for Ferguson because it is a management contractor, and they are required to observe the requirements set forth therein.

[fol. 120]. Q. In your testimony some days ago in the Carbide case, you stated that the manual provisions as contained in what you might call the 1100 series were applicable to the operations of Carbide with reference to accounting, transfers, and handling of funds, and handling of inventories, and accounting therefor, and so on, I believe.

A. Yes.

Q. Are these same manual provisions which we filed as Exhibit C-19 in the Carbide case likewise applicable to Ferguson under its contract?

A. They are. The provisions make no distinction between a construction contractor and an operating contractor, except insofar as some different type reports are concerned, but they are equally applicable to either one of these types of contractors if they are management contractors.

Q. Does Ferguson furnish any of its own funds for this operation?

A. No, sir, it does not.

Q. My attention is just called to the fact that I referred to the 1100 series. However, in the Exhibit C-19 filed in the Carbide case, there are included two of the 1200 series, two of the 1300 series, being 1201, 1203, 1306, and 1325. Are they alike applicable to the Ferguson operations under the contract?

A. 1201 covers the internal audit program, and that [fol. 121] is applicable.

Q. 1203 deals with the audit, I think.

A. This is correct. 1201, 1203—all the 1200 numbers are all involving the audit procedure prescribed by the Commission.

Q. They are applicable to the operation under the Ferguson contract?

A. Yes, sir. The 1306 is authorization of appropriation for plant acquisitions and construction. This affects Ferguson insofar as it is required to do construction work under the direction of the Commission.

Q. 1306. 1325, I mean, with reference to financial plans.

A. 1325 affects Ferguson insofar as its connection in doing work which Carbide requires in the operation of the plants. It does this miscellaneous construction work under the funds made available to Carbide under the general plants projects or the cost ceiling made available to Carbide under the general plants projects. While Ferguson itself is not issued directly a financial plan, it is an indirect participant in the plan that is issued to Carbide.

I think I previously explained to you what happens with regard to the cost ceiling. That we don't actually issue or turn over funds per se. We issue a cost ceiling. Someone may do the work, and this cost accrues under the contract that we have given the cost ceiling, [fol. 122] while we may give the funds to the other contractor that does the work.

Q. You stated a moment ago that Ferguson operated on funds furnished by the Atomic Energy Commission. How are these funds advanced to Ferguson?

A. Weekly on the basis of estimates which Ferguson presents to the Atomic Energy Commission. In other words, in the same manner as our operating contractor. We fund them weekly.

Q. You testified earlier today that Ferguson had to keep a separate record of accounts, finances, etc., with reference to this particular job.

I am not certain whether I asked you whether those records are really records of Ferguson or are they records which is the property of the Atomic Energy Commission.

A. I believe I testified that those records are the property of the Atomic Energy Commission. They are not the Ferguson records.

Q. Do you know how the accounting procedures followed by Ferguson are established?

A. Yes, sir. At the time Ferguson was selected to do

the work, they were required to establish an accounting procedure which was acceptable to the Commission.

In order to have the procedure become a uniform one that will result in the proper type reporting, the Com-[fol. 123] mission furnished Ferguson with its AEC Manual chapters establishing types of accounts and nomenclature of the accounts for construction work.

Ferguson then proceeded to prepare an accounting manual based on that issuance or manual chapter, and submitted it to the Commission for its review and approval, and this was then so reviewed and approved.

Q. What about since then as time goes on, is it subject to continued inspection and review, or what about it?

A. It is. As changes are required to be made, the Commission makes them in the accounting system. These are then furnished to Ferguson, and they are requested to revise their procedure to comply with these directions and submit them to us before they are put in—submit them to us for approval before they are actually put in effect.

Q. That policy is followed and was followed during the period we are interested in here?

A. Yes, sir.

Q. 1956. You said they are subject to continuous review—these procedures, I mean.

What does the staff, the Atomic Energy Commission staff, have to do with reference to this review and the handling of these procedures?

A. The Finance Division, which is one of the divisions of supervision at Oak Ridge Operations organization, has [fol. 124] the responsibility of auditing and reviewing the activities of the Ferguson Company, under its contract operations at Oak Ridge.

These audits will develop any discrepancies or any differences, and if there are differences, this information was then made available to Ferguson to give them an opportunity to change their methods of doing this.

Q. How constant is this supervision of these accounting systems and procedures followed out by representatives of Atomic Energy Commission?

A. In the periodic audit, we audit at least once a year, and sometimes more often than that. But we have a day-to-day relationship with the contractor, and as questions

come up, these are presented to the Commission, resolved by us, and then instruction is then given to the contractor.

Q. What does the Atomic Energy Commission have to do with, what supervision does it exercise over Ferguson with reference to personnel, personnel management, and labor problems?

A. The contract has attached to it an Appendix A with regard to the non-manual personnel. The contractor is controlled as to the number of such non-manual personnel he has on the job. This varies either upward or downward, depending upon the volume of work to be performed.

If there is an exceptionally large job, obviously more [fol. 125] organization is needed. And the type of non-manuals, their experience and qualifications are submitted to the Commission for review and approval prior to being put on the payroll.

The manual labor is, of course, dictated by the actual construction requirements. They obtain the necessary labor to do the job, and this is reviewed by the Director of the Area Construction Division who maintains a very close check on the number to see they are not excessive.

Q. What does AEC do, what control does it exercise with reference to salaries and so on?

A. The salaries are controlled by the Appendix A which contains a schedule of rates for the non-manual employees.

The manual employees, the rates are determined as the minimum rates that are permitted to be paid for construction labor by the Secretary of Labor. This determination is made usually for the miscellaneous construction on an annual basis. However, when a major construction project is started under the Ferguson contract, then a determination is made as of that particular time.

Q. I don't know whether you are familiar with this or not, but if you are, what about any collective bargaining agreements between those people who fall within the units for collective bargaining and Ferguson?

[fol. 126] A. The contractor follows the area practices fairly well, in that it, I believe, is an observer in the construction crafts' annual negotiations with the construction contractors in this Knoxville area.

Q. Is that the same policy that is followed with reference to employees of operating contractors like Carbide?

A. No, sir, it is not, because that is a different union, and there they have a specific contract for employment with the company, as opposed to the general rates that are applicable to the construction crafts in an area.

Q. But those agreements are, both for the operating and for the construction contractors, subject to approval of the Atomic Energy Commission, though different in form?

A. That is right.

Q. What about in the field of procurement of property or property management?

A. In the field of procurement, the Commission has issued AEC manual chapters in the 9,000 series which cover all the Commission's procurement.

Again, like in the 1100 series, the Commission has prescribed the policies and procedures to be used by its management contractors.

Q. Let me interrupt you just a moment. You are using figures like 9,000 series, 1100 series. What do you mean by those terms?

[fol. 127] A. This is a grouping of all the policy and procedures that covers a specific function. In this case, the 9,000 series covers procurement, contracting for either architect engineer services, construction work, supplies and materials—anything that is required to be purchased or procured.

Q. In your testimony as given in the Carbide case, you filed as Exhibit C-25 the procurement procedures as established by the Atomic Energy Commission, stating that such were applicable to Carbide in its operation under the contract.

I show you now that Exhibit C-25 and ask you if those same procurement procedures are applicable to Ferguson company in the procurement of properties?

A. Yes, sir, they are.

Q. I believe that runs from 9101 through 9110, does it not?

A. That is right.

Q. With reference to specific procurements, are letters written from time to time by the Atomic Energy Commission to Ferguson company and replies from Ferguson company to the Atomic Energy Commission?

A. Yes.

Q. I think maybe Mr. Bonnet is more familiar with those than you, so I will pass from those.

[fol. 128] Do you know whether or not pursuant to these policies as set forth in the manual Ferguson did prepare and submit to the Atomic Energy Commission its procurement practices and procedures for approval?

A. It did. It prepared a procurement procedure for its own use based on the material contained in the AEC Manual issuances which we have previously provided to Ferguson and which they were to use as a guide in preparation of their own internal procedure.

When this was completed, it was submitted to my staff in Oak Ridge who reviewed it for its general alignment and compliance with the AEC criteria, after which it was returned to Ferguson through the Area Construction Manager.

Q. What about the freedom of Ferguson company when materials are required for fulfillment of its contract—its freedom, I mean, of going out into the field and buying openly or using Government owned property which may be available elsewhere?

A. Ferguson, like all of our other management contractors, is required to first check all the available lists of surplus or excess materials that the Government has generated, whether it is within the AEC agency at Oak Ridge or its operations offices or within other Government agencies. [fol. 129] After it has exhausted all these possibilities, it then prepares its invitation for the bids for the purchase of the materials in accordance with the prescribed procedure.

Q. Again in your testimony in the Carbide case you filed as Exhibit C-32, or as a portion thereof, the manual setting forth Atomic Energy Commission's rules for utilization and disposal of excess and surplus personal property and the transfer of excess properties.

Are those procedures applicable to Ferguson in its operations?

A. Yes, they are. With regard to any surplus that it might generate in its operation, this is, of course, made available to other contractors at Oak Ridge, and in turn to other operations offices. If it is of sufficient magnitude, it is circularized through other government agencies.

Assuming, however, that none of these other sources are

willing to take this property, it is then declared excess, at which point it transfers this material to Carbide for its sale through its established facility for sale of Government surplus material.

The only reason we do that is we do not establish two organizations to do essentially the same sort of thing. If Carbide was not performing that function, then either [fol. 130] some other management contractor than Carbide might do it, or Ferguson might be requested to do it.

Q. Do I understand that the only difference is that Carbide actually makes the sale itself, while the surplus material coming from Ferguson is transferred to Carbide, and Carbide sells it?

A. This is correct, because, as I pointed out, we don't want to set up two organizations to do the same thing. In the interest of economy, it is much more desirable to have one division of an organization handle it.

Q. You also filed as an exhibit in your testimony in the Carbide case the manual provisions designated as 5,002, and maybe some others, 5,015, with reference to procurement and property management.

Are those alike applicable to Ferguson?

A. They are in that like the other AEC manual chapters they are prescribed by the Commission and applied to the operations of all of our management contractors. And this covers, the 5,000 series covers all the supply and management field, supply of property utilization.

Q. There was also introduced in the Carbide case as Exhibit C-28 or a part of Exhibit C-28 the manual provisions with reference to standard sub-contracts and contractors purchase orders.

How far is that applicable and used in connection with [fol. 131] reference to Ferguson?

A. This is applicable to Ferguson in its entirety.

Again, as a management contractor, we have prescribed for its use like we have for others the provisions of this issuance which establishes standard forms for sub-contracts and standard terms and conditions for sub-contracts and purchase orders.

Q. Suppose, because of conditions that exist or eventualities that arise, it is necessary to deviate from the forms

that have been approved. What procedure is followed with reference to Ferguson?

A. If Ferguson for some reason found it necessary to deviate, they would first have to check with the Oak Ridge Operations Office of the Commission in order to get permission to do this. And this is assuming that we would agree with their request.

If we did not agree with it, they would still be required to use the form as is.

Q. Was such procedure followed during the period material to this lawsuit in 1956?

A. Yes, sir.

Q. Mention was made a bit ago about the requirement that Ferguson use for fulfillment of its contract Government property that was in possession of other governmental agencies before making new purchases.

[fol. 132] To what extent is that policy followed out?

A. That is followed out in every acquisition of any sort of equipment that Ferguson might need in connection with its directed construction job.

The Ferguson company would make up its take-off of building materials from any job that they are required to do, and before any purchasing effort is made at all, the excess or surplus lists of AEC and other Government agencies are first scanned to see whether it is feasible to obtain them from those lists.

Q. Now who does that scanning? Ferguson personnel, or Atomic Energy Commission? Or what does Atomic Energy Commission do to see that procedure is followed?

A. The Ferguson personnel do this because we make available to them excess lists within and without AEC as soon as they are available to us, in order that they may use them.

And this is, oh, part of the daily administration and supervision that the Director of the Area Construction Division gives to the contract.

Q. Who is this Director to whom you now make reference?

A. This is Mr. Bonnet.

Q. Is that applicable, and when I say "that," I mean the evidence you have just given with reference to obtain-

[fol. 133] ing from surplus properties the various items required, applicable to materials like ordinary building materials, to vehicles like automobiles, to office equipment like desks or typewriters? Or just how much of the field does it cover?

A. This covers naturally major items. One can't expect to economically get a keg of nails or a few hundred board feet of lumber or several hundred brick or cinder block from a surplus list and ship them any great distance. Otherwise the cost of this would be just too high.

But it is specifically followed in any sort of a major piece of construction equipment, like a crane, a tractor, a shovel, automobiles if they require automobiles, and trucks. Those are obtained from the surplus list if at all possible.

Q. Now when you get down to the place where Ferguson is going to dispose of something that they have had on hand and which is surplus or no longer needed by them, what do they do with it, if it is not going to be sold?

You referred to what they would do if it was going to be sold—transferred to Carbide, and they would make the sale.

A. The sale of the equipment is the last step in the procedure to determine whether it can be utilized by any other Government agency. In other words, prior to turning it [fol. 134] over to Carbide for sale, it is double listed, its condition noted. The lists are made available to us. We would have dispatched them to other operations offices of the Commission or other contractors within the Oak Ridge complex for their use.

If after a certain elapsed period of time none of the Commission installations desired this equipment, it would then be made available to other agencies of the Government for the same sort of check.

After all of these sources have been checked and no one desires the equipment, or there is some of it left at this point, then the determination to sell is made, and it is transferred to Carbide.

Q. Who makes the determination eventually that it is to be sold, if such is to be the disposition of it?

A. The Atomic Energy Commission.

Q. And its transfer to Carbide is made at the direction and order of the Atomic Energy Commission?

A. This is correct.

Q. And take such materials as may be needed by Ferguson in the category of gasoline or fuel oil, solvents, and so on. Does AEC personnel procure those for Ferguson, or how are they handled?

A. The AEC makes bulk procurements of gasoline and fuel oil either on GSA contracts, or on direct contracts [fol. 135] with suppliers and vendors, and then issues these materials to the Ferguson company as they are needed.

Q. Are those materials then paid for by remittance from Ferguson to the AEC?

A. No. No, the payment for the supplies is made directly by the Atomic Energy Commission, and they are issued to Ferguson as a Government furnished item.

Q. How broad is the scope of that type of handling of materials so far as Ferguson is concerned? Does it go further than gasoline? You referred to gasoline alone.

A. Yes, it goes into fuel oil. It goes into motor vehicles. For any purpose they needed helium gas, for any purpose they need alcohol. In the case of alcohol, we might obtain a permit for them to permit them to buy it at the same price and tax exempt as the Government agency purchased alcohol.

Q. And in your testimony in the Carbide case, you filed as a portion thereof and as part of Exhibit C-35 I believe it was, the procedures established by the Atomic Energy Commission with reference to transportation and transportation policies.

You now have in front of you that Exhibit C-35 that is filed therein?

A. Yes, sir.

Q. Is it applicable to transportation and transportation [fol. 136] policies of Ferguson?

A. Yes, to the extent that Ferguson has any activities falling within the scope of this AEC manual issuances, Ferguson is bound to observe them.

Q. So far as you know, does the Ferguson company have any property at all on the Oak Ridge area which it uses in connection with fulfillment of its contract?

A. To the best of my knowledge, they do not.

Q. Now what about vehicles for transportation of materials or for personal transportation necessary by this company in its operation at Oak Ridge?

A. Any vehicles needed for the transportation of materials are furnished by AEC. Any vehicles needed for transportation of personnel between the various construction projects scattered over the Oak Ridge area is furnished by Government vehicles made available to Ferguson.

Q. Does the Commission have any rules or regulations under which it exercises control over the use of these vehicles?

A. Yes. The general rule is that all Government owned automobiles must be used for official purposes of the Commission and cannot be used for any other purpose, and Ferguson is bound by that requirement.

Q. I take it that Ferguson at times acquires inventories or some stockpiles of materials that it is necessary to acquire [fol. 137] for use in its work. How are those inventories handled or controlled, if you can tell us?

A. They are controlled by the fact that they do not buy in excess of their requirements. Recognizing that we do not have the complete details on all the work that they are going to do during a given period, we have permitted them under a tight control to buy some general purpose items for use. But the inventory levels are established by AEC so that we don't get in a situation of creating an excess.

Q. You have in front of you, I believe, Exhibit C-34 that we filed in the Carbide case which deals with the procedures established by the Atomic Energy Commission for warehouse management.

Is that likewise applicable to warehouse management by Ferguson?

A. Are you talking about the whole exhibit, Mr. Kramer? The whole exhibit contains more than just warehouse management. It starts off by including AEC manual chapter regarding record disposition and policies and regulations.

Q. Are those also applicable to—I did not have that in mind because I believe that is number 5230.

A. This is correct.

Q. I am looking particularly at 5120, 5100 series, which [fol. 138] we were talking about a moment ago.

A. 5180. Chapter 5180 which is included herein covers sale of personal property. Is this the chapter you are referring to?

Q. Yes. Maybe it will be easier if you take Exhibit C-34 and go through them with No. 5120.

A. I found it.

Q. 5141, 5180, 5182, and so on, and tell us whether or not they are applicable.

A. 5120 is warehouse management.

Q. Yes, sir. That is what we were asking about particularly, but go on through with the rest of them.

A. 5141 is official use of AEC motor vehicles and aircraft. 5180 is sale of personal property. 5182 is disposal of surface uranium contaminated metal scrap.

All of these are the established Commission policies for application in these various activities, and are applicable to all of our management type contractors and are applicable in this case to the Ferguson company.

Q. I want to go now into this field of health and safety. What does the Atomic Energy Commission, if anything, have to do with establishing practices and requirements for protection of health and safety of the employees of this company, Ferguson?

A. To the extent that the employees of Ferguson are [fol. 139] possibly exposed to the various materials that are produced in the facility, they are, of course, monitored in the same manner as the operating contractor's employees with film badges, and periodical physical tests, so that they are in effect then receiving the same treatment; and this is a requirement of the Commission that this be done.

With regard to their construction activities, the standard safety rules have been adopted by the Commission and are prescribed to the contractor for observation by him in the conduct of the work. And the safety engineers of the Atomic Energy Commission periodically review the job to make certain that this is followed.

Q. And I take it some of the employees of Ferguson are from time to time placed in positions because of the nature of the work done by Ferguson where they do come in contact with levels of radiation and exposure?

A. This is correct. And whenever this occurs, they are all equipped with film badges and necessary safeguards.

These film badges are read and checked to make certain that no one receives an excessive exposure, that is, exposure beyond the limits prescribed by the Atomic Energy Commission.

Q. Is that similar procedure followed with reference to employees of Carbide, the operating contractor?

A. Yes, it is.

[fol. 140] Q. Ferguson under its contract, and its employees at times because of its services, come into information no doubt with reference to materials or procedures that are highly classified, do they not?

A. They do.

Q. What is done with reference to the protection of those secrets or that classified information?

A. In the first place, they cannot have access to this type of information without first having gone through the clearance procedure that the Commission has established for all of the contractor employees and management or otherwise that have access to those data, namely, this is a clearance procedure that establishes the fact that they can be allowed access to this information.

In the case of the Ferguson employees who need this access, this procedure is gone through, and they are cleared by the Commission.

Regarding the data itself, Ferguson is required to observe the same safeguards that any management contractor is required to observe in properly storing this material, in locked and safe locked type files, vaults, and to have the necessary guard service to patrol the area to insure its safety.

Q. It is practically the same procedure you have testified to with reference to Carbide?

[fol. 141] A. It is, sir. The only difference being that the quantity of information is not nearly the same order of magnitude.

Q. They don't have access to the quantity of information as a rule that the contractor does?

A. The area and volume is reduced considerably because there is a lot of unclassified work that is performed by Ferguson.

Q. What about the policies or procedures with reference to what might be classed as general management areas?

I have got in mind things like initiation of litigation or defense of litigation that might be started against Ferguson. Or the handling of any claims for refunds or uncollectible accounts and so on. Is there any difference in the method this sort of thing is handled with this contractor and the management contractor such as your operating man, Carbide?

A. No, there isn't any difference. As soon as Ferguson receives any notice of a lawsuit being filed against it, they immediately notify the Atomic Energy Commission, as is required by the terms of their contract, at which time the Commission determines how the suit will be defended.

Likewise, if any litigation is to be instituted, the Commission directs it as to how it shall proceed, directs Ferguson as to how it shall proceed. Ferguson has no latitude [fol. 142] in this matter.

This is true with regard to claims. It cannot process claims because these claims basically are against the United States, and therefore we take over the follow-up of any claims, negotiations, settlements, and so forth.

Q. What about Ferguson permitting outside people to visit the work that it is doing on the job under its contract or permitting outside people to inspect any of its work and so on?

A. With regard to the visits, as long as the work is unclassified, the visits are permitted, but only for information purposes. With regard to the inspection of the work under any regulatory procedure of a political subdivision, we have instructed Ferguson to deny this right of inspection. The Commission does not concede that as a Federal agency that it is subject to the requirement.

Q. What about policies to be followed by Ferguson with reference to insurance, or with reference to bonds that might be required to give?

A. The Commission has clearly established policies and procedures regarding all types of insurance. That includes workmen's compensation, public liability, automobile liability, and accident. And the amounts and types of insurance are directed to Ferguson to obtain in these various areas, and after they obtain proposals for them, they are submitted [fol. 143] to us with their recommendation, and if we agree, we authorize the acceptance of them.

Q. So the Atomic Energy Commission does control in this matter?

A. Yes, sir, we do.

Mr. R. R. Kramer: Cross examine.

Cross-examination.

By Mr. Rice:

Q. Mr. Vanden Bulek, if this is within your knowledge and information, what size force is employed by Ferguson at Oak Ridge?

A. Depending on the amount of work that Ferguson has been directed to perform, this varies from anywhere from 400 to 1200 or more. It is entirely dependent upon the amount of work that they have been directed to perform for us.

Q. Is there any part of that force that is maintained constantly there?

A. The non-manual employees, the ones that take care of the office work, and the engineers, they are a fairly stable force, because they follow all the activities of all the miscellaneous construction work that is required to be performed. The big variation occurs in the manual or craft employees.

Q. I take it that it would be considerable variation from [fol. 144] day to day in the size of that force?

A. It depends entirely on the scheduling of the work. If a large miscellaneous project comes to completion, they will drop these people off, and this will give considerable variation, but generally the volume of the work is such that it spreads out fairly evenly over the course of a year. It is only when some real major project is added or completed that a large variation takes place.

Q. Would there be included among the permanent force that they maintain there a certain number of the various crafts such as carpenters, brickmasons, etc.?

A. No, sir, they would not maintain these on the payroll unless they actually had work to perform.

Q. They would procure those from time to time as needed?

A. In accordance with the regular hiring practices of construction contractors, yes, sir.

Q. Has it been customary for them to recruit such manual labor as they need from the surrounding area?

A. Yes. They obtain as much of their manual labor as they need in the surrounding area. Occasionally they may have to go afield for a specialist in some particular craft, but generally they have been able to get these locally.

Q. In the course of Ferguson's work up there, will they find the occasion to use practically all crafts that engage [fol. 145] in the construction trade?

A. I think that is—yes; yes, they would.

Q. Carpenters?

A. Carpenters.

Q. Electricians?

A. Yes, sir.

Q. Brickmasons, plumbers?

A. Riggers, operating engineers, boilermakers, steamfitters. They use them all.

Q. You testified on direct examination that a project that Ferguson would perform might vary in size and cost anywhere from \$2,000 to \$1,000,000. Did you not state that?

A. Yes, sir.

Q. Now describe for me, if you will, an example of a \$1,000,000 project or something in that vicinity.

A. I would have to look at the contract and try to pick one out.

Q. Have there been projects of that magnitude?

A. Yes, sir, there have been projects of that magnitude and greater. I think I can go through one of the amendments of the contract here.

Mr. R. R. Kramer: This doesn't necessarily apply to the same time but does apply to the work they have done during the whole period.

[fol. 146] Mr. Rice: Yes, sir, I understand.

Mr. R. R. Kramer: No. 5.

A. By Modification 5 to the contract, entered into on the 5th day of November, 1956, we added a project that involved roughly about \$6,000,000—\$7,000,000. \$6,000,000 is correct.

By Mr. Rice:

Q. Can you describe, without going into too much detail, just what a project of that magnitude would represent?

A. Well, this was the construction of a multistory building, and an extension of another building of about 118,000 square feet of gross floor area, almost three million including basement and change areas. It was to be so constructed it would house heavy machinery such as rolling mills. It had to be equipped with cranes, monorails, elevators.

It had to have installed into it the necessary duct work to give us extreme controls of humidity and temperature far beyond what is normally required in a manufacturing operation.

Q. That project was accomplished by Ferguson itself?

A. Yes, sir.

Q. Without the intervention of any sub-contractor?

A. Well, they may have had some sub-contracts. For instance, they have a regular cost plus a fixed fee sub-
[fol. 147] contractor that does all of the electrical work, since this is a general requirement of the construction industry, that the electricians be hired by an electrical contractor. And there is on the scene a cost plus a fixed fee electrical sub.

It is also possible that they may have had a sub-contractor in there to do some insulating work in the asbestos field where the asbestos workers sometimes observe these same criteria, that they won't work for anyone that is not an insulating contractor.

Q. Except in those rare specific particulars, Ferguson did the work itself with its own employees?

A. Yes, sir.

Q. What was the reason for having Ferguson do that itself? Was it security reasons, or was it the fact that there was not enough time to blueprint the job, or any other reason that you might have referred to on direct examination?

A. In this particular instance, it was really the requirement to do this job to meet a very, very tight deadline that would not permit us to prepare plans and specs for a complete package. This had to be done by a certain date. And we had to get it started before the final plans and specifica-

tions were ready, and as the architect engineer turned out the plans and specs, they were passed on to Ferguson to [fol. 148] prepare construction drawings and follow on through with construction.

Q. I take it that Ferguson is familiar enough with the general operation and what is called for up there that they can get along without the specificity and plans that an outsider could?

A. Well, they can, except that in this particular case we did prepare the plans and specs, but the scheduling of the requirements for the facility was such that we could not wait until it was a complete package, and as the architect engineer prepared them, he turned them over to AEC, and we transmitted them to Ferguson to go ahead with the work, so that we weren't waiting until the architect engineer got completed with his job and then go out and invite bids.

Had this sort of time been available and also had it been practical to do it this way, obviously we would have followed our standard procedure which would be to advertise for sealed bids, but in this particular instance this was not feasible.

Q. You think an outside contractor could not have done that with all the skill and finesse that Ferguson could?

A. No, sir, I don't think that. I think that the only reason we had it done this way was because we had to have the job in a hurry.

[fol. 149] Q. An outsider couldn't have got it for you in a hurry?

A. Well, by the very requirements leading up to obtaining an outside contractor, that alone would have taken up more than the time that was available to us.

Q. You did not have time to negotiate with an outside contractor and go through the forms necessary to effectuate an arrangement?

A. The controlling thing here was complete plans and specifications. There was also another factor involved. This was an addition to an existing building. It had to be constructed in such a way that we did not interfere with the operation going on in the existing structure. So that the scheduling and the manner in which the work was to be done was controlled by the operating contractor to some

degree, especially where the tie-in came to the existing building, and all of these factors entered into this determination to do it this way.

Q. All the Ferguson people are security cleared, too, if they are to work on a project of that sort?

A. That is right. We require that they be cleared if they have any access to restricted area or access to restricted data.

Q. It would have taken some time to effect a security clearance for an outsider?

[fol. 150] A. That would be part of the consideration. However, this did not enter into the consideration in doing it this way. In other words, we do not use security as a basis for making these assignments.

When I say all Ferguson people are cleared, only those that required clearance for access to classified data. They have only access as they need to do their job.

Q. There are some Ferguson employees who need more security clearance than others would?

A. The clearance is equal across the board. Once you are cleared you have access to data. But the Commission's procedure requires that you don't have access to any more data than you need to do your work. It is controlled in that aspect.

Q. What I had reference to was this mainly. As you are constructing an addition to an existing building which is in the critical area, you would not permit anyone to work in that facility unless he had security clearance, would you?

A. If in the course of this he would have visual access to things that were going on in the existing building and other operations or other end products, then we would require clearance of that individual before we would permit him to work there.

[fol. 151] Q. Now the sort of work that Ferguson does day to day would range completely up and down the scale, and I take it as far as amount goes, it might be installation of a wash basin in a laboratory or it might be the construction of an expensive addition to an existing building, or the alteration of an existing building?

A. Yes, sir, that is correct. The type of job that we have just been talking about, this addition to building 9215, is the exception rather than the rule.

If you will examine the contract, you will note that there are a variety of small jobs that have been added to the contract at various times which I would say generally range in the \$2,000 to maybe \$30,000 or \$40,000 range. But the sort of job that we just talked about, the \$6,000,000 one, is an exception. This was dictated by the requirements of the Commission.

Q. Who performs the jobs under \$2,000?

A. This may be done by Ferguson or it may be done by the operating contractor.

Q. By Carbide?

A. Yes, sir.

Q. Does Ferguson's work also consist of repair work on existing facilities?

A. Yes, sir, if they are directed to do it.

Q. They may be called upon?

[fol. 152] A. Yes, they may be called upon to, as I stated before, to tear down partitions, re-erect them in a different alignment. They may be required to remove floors and replace those floors to take heavy loads. All of this is repairs and alterations to a structure.

Q. Mr. Vanden Bulck, when Ferguson does any of this work they may be called upon to do, who actually supervises Ferguson's employees as they physically go about the labor necessary to perform these tasks?

A. The supervisory employees of Ferguson do this. The craftsmen are supervised by a foreman. The foremen are supervised by general foreman. And beyond that might be supervised by a superintendent in that particular craft.

Q. In other words, it is just like any other contractor would go about doing a job?

A. I would assume that's the way the other construction contractors operate. I think there are certain rules that require them to have certain supervision, but I am not an authority on that point.

Q. Is there any liaison at all between Carbide and Ferguson?

A. Yes.

Q. What sort? Describe that, please, sir.

A. Carbide will write a letter requiring certain work to be done which they would have discussed with Ferguson [fol. 153] before they write it. It is a very close relation-

ship between Carbide and Ferguson because they are both—one is engaged in operating a facility and producing product, and the other is engaged in doing what miscellaneous construction is needed to help them do it.

Q. Does Carbide exercise any supervision at all over Ferguson in Ferguson's performance of its work?

A. No, sir, only in the scheduling of the access to facilities that they are operating so as to insure that there is no interruption of the production effort.

Q. Would anyone give any orders or instructions to Ferguson's employees except Ferguson's own supervisory people?

A. No.

Q. They would not. How long, Mr. Vanden Bulek, has Ferguson been on the job up there at Oak Ridge, if you didn't testify to that directly?

A. Since about '55 or '56, thereabouts. I think '55 some time. We solicited proposals for this miscellaneous construction in 1955.

Q. Was anyone operating in a similar capacity there prior to the time that Ferguson came in?

A. Yes, sir, there were. We, as I pointed out before, have occasion for this miscellaneous type construction work ever since the facilities were first built.

[fol. 154]. We also had prior to that time a great number of major projects, and it was our general practice to use the contractors that were pursuing these major projects to do this miscellaneous work.

As soon as the major projects were finished, however, and this contractor moved off the area, then we were faced with the requirement of obtaining a construction contractor to do this miscellaneous work, which resulted in the invitation for proposals we sent out in 1955.

Q. You actually had no resident permanent contractor there then prior to the time that Ferguson came in?

A. No, sir, because, as I pointed out, we always had this major construction job going on.

Q. And people were available to do anything?

A. People were available to do it, and these contractors were cooperative and understanding what our problems were and carried out the work. This is just the way it worked out.

Q. This arrangement was arrived at then based upon experience?

A. Yes, sir. The need was certainly dictated by the experience we had over the years.

Q. These contractors you referred to before Ferguson came in, did they include Maxon and J. A. Jones?

A. It included Maxon. I think J. A. Jones was some [fol. 155-156] time before that. They were basically responsible for constructing the original plant, and when they finished, they moved out. But Maxon was one of those contractors that did major projects for us, and then we added this miscellaneous work to it as they went along.

Mr. Rice: I believe that's all, Mr. Vanden Bulek.

Redirect examination.

By Mr. R. R. Kramer:

Q. Mr. Vanden Bulek, when some work occurs out there that Carbide sees that they think needs to be done and then later Ferguson is asked to do, does Carbide request Ferguson to do it, or does Carbide request the Atomic Energy Commission to get Ferguson to do it?

A. The request goes to the Atomic Energy Commission for transmittal to Ferguson, since Carbide has no administrative responsibilities under the Ferguson contract.

Q. So those requests are transmitted through or come through, rather, Atomic Energy Commission, and then if Atomic Energy Commission approves them, sends them on to Ferguson?

A. This is correct.

Mr. R. R. Kramer: That's all.

[fol. 157] GEORGE W. COMER, being first duly sworn, was examined and deposed as follows:

Direct examination.

By Mr. R. R. Kramer:

Q. Mr. Comer, how do you sign your name?

A. George W., or G. W.

Q. May I ask your age, please?

A. Fifty-six.

Q. Where do you live?

A. At present I live at Oak Ridge, 312 Virginia Road.

Q. Are you connected with The H. K. Ferguson Company?

A. Yes, sir.

Q. How long have you been connected with this company?

A. Since March, 1940.

Q. How long have you been stationed at Oak Ridge?

A. I first came to Oak Ridge with the Ferguson company in September, 1955. I remained here until December, '56. I was transferred out to Cleveland. I returned to Oak Ridge in June, '58, to the present.

Q. So that during most of the period the Ferguson has been operating under its present contract, you have been connected with the Oak Ridge operations?

[fol. 158] A. Yes, sir.

Q. In what capacity are you now connected?

A. I am the project manager.

Q. How long have you been project manager?

A. When I returned in June of 1958, I returned as acting project manager. About September of the same year, I became project manager.

Q. I believe the previous project manager had died?

A. Yes. He was in ill health when I returned, and before he died it was recognized he wouldn't recover, so I was made project manager.

Q. What was the type of work you were doing on the project when you were here in '55 and '56?

A. In '55 I came as general superintendent, would have charge of all the field work. The project manager originally

resigned in about four months, so I became—the volume of work hadn't reached the point at that time where they required a project manager, so I assumed the duties.

Q. You had the job but neither the salary nor title?

A. That's right.

Q. You are familiar with this contract AT(40-1)-2014 under which Ferguson is now operating, of course?

A. Yes, sir.

Q. Has Ferguson at all times recognized, and does it now, the right of the Atomic Energy Commission to direct [fol. 159] and control its activities out there under this contract?

A. Yes, sir.

Q. What type of supervision does the Atomic Energy Commission exercise over your operations out there?

A. All work that we do comes under the direction of Mr. Bonnet, the Director of Construction for the AEC. We do nothing unless we receive a directive from him to initiate the work.

Q. After having received a directive from the Atomic Energy Commission through Mr. Bonnet, to do a certain piece of work, what, if anything, does the Atomic Energy Commission—either Mr. Bonnet or other agents of the Commission—do towards supervising and controlling the work you are doing there?

A. Well, of course, we have the reports as required by the manuals.

Q. How closely do you follow those requirements of the manuals that are furnished you by the Atomic Energy Commission?

A. We follow them strictly.

Q. What is done, if anything, by the Atomic Energy Commission to insure or make certain that you do follow them?

A. They have a staff, Mr. Bonnet has a staff of six to eight men, engineers, who follow our work at all times. These men are assigned to different jobs under his direction [fol. 160]. And they make a very careful check on the work that we do.

Q. Do they at any time make suggestions of changes or complain that you are not complying with it, and, if so, what happens?

A. Yes, they make quite a few suggestions. We have the privilege of disagreeing with them. If we can't reach an agreement, Mr. Bonnet is the final authority, and if he says it has to be that way, that is the way it is. He does expect us to use our ingenuity in new methods or anything like that, they want to know.

Q. Where is the home office of The H. K. Ferguson Company?

A. Cleveland, Ohio.

Q. What is the nature of the general set-up of The H. K. Ferguson Company? What kind of work does the company do in its overall corporate set-up?

A. We are both engineering and construction. We also do management work. We make surveys of existing facilities in the attempt to improve those facilities. We do both lump sum work and fee work.

Q. Can you give us any indication of the size of The H. K. Ferguson Company, and corporate structure?

A. The H. K. Ferguson Company is a separate entity, but it is owned by the Morrison Knudsen Company of Omaha, Nebraska.

[fol. 161] Q. In other words, it is a subsidiary of Morrison Knudsen Company?

A. Yes, sir.

Q. To what extent does your home office or does the parent company, Morrison Knudsen Company, control or dictate the policies and the work that goes on at Oak Ridge?

A. They exercise no control. The control is left in me.

Q. What about reports that you make to the home office of your corporation?

A. We keep them apprised of the work in progress. We send monthly a financial statement showing the expected fees. That's about the extent of it then.

We keep them apprised of our safety programs and things like that that would be of interest in the rest of the corporation, or the rest of the company.

Q. In what way are your operations at Oak Ridge financed?

A. Entirely by funds received from the Atomic Energy Commission.

Q. In what way do you make requests for or make known your needs for funds for this operation?

A. Monthly we estimate the requirements for the following month. We advise through Mr. Bonnet, advise the Commission through Mr. Bonnet's office of our requirements. [fol. 162] Q. What does the home office of your corporation or any other office away from Oak Ridge have to do with determining those estimates?

A. Nothing whatsoever.

Q. Who does determine those estimates?

A. Myself with the aid of my chief accountant and other personnel under me.

Q. Then when you have determined the amount of money you anticipate will be needed for carrying out your obligations under this contract at Oak Ridge in the succeeding month, what do you do?

A. We write a letter to Mr. Bonnet, the area construction, outlining what we need and why we need it.

Q. Copies of those letters and some of those originals will be filed by Mr. Bonnet when his proof is taken. But after you have submitted this figure or this statement in the form of a letter to Mr. Bonnet, what happens?

A. I don't know the internal—his part of it.

Q. What is the next that you know about it?

A. We receive a letter and a check, made to The H. K. Ferguson Company, a Treasury check.

Q. Is that as to your estimate of this considered by Mr. Bonnet or his force?

A. Sure. We go over it together at times. This check, we do not get the check for the month. We get it weekly. [fol. 163] It is broken up into weekly.

Q. You submit an estimate by the month but you get remittance on the weekly basis?

A. That is right.

Q. Having received this weekly remittance from the Atomic Energy Commission, what do you do with it?

A. We place it in the general account which we maintain at the Hamilton National Bank.

Q. At Oak Ridge?

A. At Oak Ridge.

Q. Is it at all times or always deposited in the Hamilton National Bank at Oak Ridge?

A. Yes, sir.

Q. Why not deposited elsewhere?

A. We are allowed to select a bank. The bank had to be approved by the Treasury Department as a depository for Government funds. We suggested the Hamilton National Bank. The Commission approved that bank.

Q. Do you know in what way that account is designated on the books there?

A. It is designated as a Government—it is a general account for the Ferguson company designated as Government funds.

Q. And designated on the records as a Government account?

[fol. 164] A. That's right; yes, sir.

Q. Is any part of these checks ever deposited by your people anywhere else or in any other account except this Government account that is in the Hamilton National Bank at Oak Ridge?

A. No, sir.

Q. Do you know whether the contract number is identified in connection with that deposit?

A. It is, and it is also on the check.

Q. Money having been deposited there in the Hamilton National Bank at Oak Ridge as you have described, how is it withdrawn from that?

A. It is withdrawn by checks prepared by our accounting department and signed by two members of our organization—myself and the chief accountant normally.

Q. Do you withdraw from this one account, this general account, Government account, monies for all items including payroll, or is there any withdrawal in lump sums for any purpose?

A. Well, we have a separate account for our payroll. We draw one check to cover the weekly payroll, and deposit it.

Q. You draw that check on what?

A. On the general account.

Q. And then deposit it in what?

[fol. 165] A. In a special account, special payroll account.

Q. Where is that account kept?

A. In the Hamilton National Bank.

Q. Then how is that fund disbursed and for what purposes?

A. It is disbursed by weekly payroll. Each individual employee is paid weekly by this check, by individual check.

(Discussion was had off the record.)

Q. Mr. Comer, do you have here a check of the type used for withdrawing funds from the Hamilton National Bank on this payroll account that you just referred to?

A. I do.

Q. Will you please file that as Exhibit F-4.

(Exhibit No. F-4 was filed.)

Q. I notice that on the upper left-hand corner of the check there is a designation as being Government account No. AT (40-1) 2014. I believe that is the number of your contract, is it not?

A. Yes, sir.

Q. Is the money deposited in the payroll account that money which is withdrawn for any other purpose except for payroll purposes?

A. It cannot be, no, sir.

Q. From the other account known as general account, [fol. 166] for what purpose are funds withdrawn outside of the payroll matters?

A. To pay invoices which have been approved. Also to pay withholding taxes, social security, and things like that.

Q. Then in the payroll transfer account, you transfer only an amount sufficient to meet needed payroll, and you don't include therein the withholding and social security and so on?

A. No, we do not.

Q. Those items are paid out of your general account?

A. That is right.

Q. Do you carry any third account in the Hamilton National Bank or other bank?

A. We do. We carry a third account at the Hamilton National Bank.

Q. At Oak Ridge?

A. At Oak Ridge.

Q. For what purpose and what funds are deposited in it?

A. It is to cover any non-reimbursable items. It is a rather small account. We keep it small. It covers any emergency situation that might come up with our employees. Occasionally we have a sick leave, in the Appendix

A. There might be a man that may run over that. So we

[fol. 167] pay him out of—to keep him solvent, we pay out of that.

We also deposit our fee in that, and then transfer that to our Cleveland office at a later date.

Q. Are the checks in payment of your fee that is received by you under your contract deposited in that special account rather than in your general account out there?

A. They are deposited in the special account.

Q. In this special account?

A. Yes, sir.

Q. So that the fee is not in any wise mixed with the other account?

A. No. No.

Q. The other items that are deposited in that special account, as I understand it, are such sums as may be necessary to cover items of expenses for which the Government is not responsible under your contract?

A. Yes, sir, that is right.

Q. Dealing with personnel that are employed under your contract, there is attached to the contract a schedule with reference to salaries and wages. How is that schedule arrived at?

A. The salary schedule is arrived at—was arrived at by our presenting to the Commission through Mr. Bonnet our findings on salary ranges required to get the right type [fol. 168] of people to perform the work.

Q. How closely are you held to and do you follow the schedule of rates shown in that exhibit?

A. Well, I cannot exceed the maximum. They let me go under the minimum, but I can't exceed the maximum. And I have quite a hard time getting some of them up to the maximum. I would say we average the range that is shown in the salary brackets. We divide them by classifications, types of work they do. This is the non-manual I am speaking of.

Q. Is there any salary or are there any salaries in connection with personnel employed at Oak Ridge which are not paid by the Federal Government?

A. At the present time my salary is being paid by my home office. Also at the present time there are about five individuals that get an adjustment to their salaries that comes out of the home office.

At the time of this, through '57—this only started in September of '59.

Q. What about back in 1956, November, 1956?

A. Everything was paid out of—was reimbursable, paid from them.

Q. Was paid out of funds, the Government funds?

A. That is right.

Q. You used the word reimbursable. Do you advance [fol. 169] the monies and then get it back from the Government, or do you at all times pay the expenses, including payroll and salaries, out of funds the Government has given you?

A. Reimbursable is a term I suppose we use on fee work. I have fallen into the habit. I would say 99 per cent of the time we use the Government money. In case of a transfer of a man, new employee down from Cleveland, they would pay him, advance him money for expenses. That would be reimbursable in the sense that I am speaking of reimbursable.

Q. Otherwise it is paid out of this money the Government has already advanced to you?

A. Yes, sir.

Q. What is done with reference to the Government auditing the funds furnished to you to operate on at this place?

A. Well, they audit us, I would say, constantly. They have a general audit yearly, but we are subject to their audit at any time. And they do have three men that are more or less stationed in our building that maybe once a month start over our books, checking invoices and our payrolls and other records that we have.

Q. Are these records that you keep of the transactions that occur in the Oak Ridge contract forwarded by you to your home office at any time?

[fol. 170] A. We forward copies of our vouchers. These vouchers are checked by auditors in our home office. But that is an independent check. That is not a—

Q. Those are vouchers for the fee?

A. No, they are the vouchers for—

Q. Other vouchers are checked there?

A. —for invoices, yes, sir.

Q. What does the AEC do about checking vouchers?

A. They run the same check. The check that we make in

our home office is strictly, I would say is a gift in a sense. It is company policy to keep us on our toes.

Q. What becomes of these records that you keep out here at Oak Ridge after they become a year or two years old or some period of time?

A. They are stored and accessible at all times.

Q. Who designates the place for storing them?

A. Mr. Bonnet or one of his designated representatives.

Q. Atomic Energy Commission?

A. Yes, sir.

Q. How much equipment or machinery of any type does H. K. Ferguson have here at Oak Ridge that you own?

A. We do not have any.

Q. Do you bring any equipment or machinery owned by H. K. Ferguson into the Oak Ridge area for use there?

[fol. 171] A. We do not.

Q. Have you at any time?

A. We have not.

Q. From what source do you get the equipment that you may need to operate on? Take motor equipment or machinery or even hand tools.

A. We get it from the Atomic Energy Commission.

Q. What way is it obtained?

A. We determine the need, send through either a letter or form prepared for that purpose through to the AEC through Mr. Bonnet's office. He decides on the need on the equipment.

If there is a question, we consult on it, and from there on, why, he lets us know when and where the equipment will be available.

Q. Who has the last word of the say on the quantity or the type or the particular equipment or tools that you may be buying?

A. The Atomic Energy Commission.

Q. Your answer a moment ago was that he let you know where it would be available. In what way do you obtain it? Do you purchase it for the Government, or how do you get it?

A. We very seldom purchase for the Government. That is the last recourse. In case of heavy equipment, the [fol. 172] Government through their staff checks the various installations. They go to the Air Force, the Army and

Navy, after having, I assume, been to the entire AEC installations.

If they find a piece of equipment that they think we could use, they will send—I will send one of my men along with one of the Commission's men to inspect the equipment, see if it meets the requirements, and is in good shape.

If we want it, then they will make the decision and handle the details of getting it delivered to Oak Ridge.

Q. It will be transferred and delivered to you at Oak Ridge for your work?

A. It is delivered to us for our work. The title of it, of course, isn't transferred. The record, we carry the record of the piece of equipment.

Q. Is it identified any way as your property or property of anybody else when it comes to Oak Ridge?

A. It is identified as property of the Atomic Energy Commission.

Q. In what way is that identified?

A. It has a serial number. The serial number is either stenciled or stamped on. The property records which we maintain for the Commission also shows that. And, of course, they maintain the same record.

Q. And on these property records is that serial number [fol. 173] recorded?

A. Oh, yes.

Q. What is done to those records? You send those to your home office?

A. No. Those records remain in Oak Ridge.

Q. Suppose that you got a truck under this procedure in October or in August, 1956, and in November, 1956, it was found to be non-usable out there. What is your procedure? How do you dispose of it?

A. We advise the Commission that the piece of equipment isn't—in our opinion not worth repairs or maintenance required. We ask that they give us another piece of equipment to replace it.

If they so decide, why, when we get the new piece of equipment, we ask the disposal of that piece. They can tell us to advertise it. They can designate another agency which we are to deliver it to. Or we can deliver it at their request to the sales, surplus sales division of Carbide.

Q. Do you at any time receive instructions from the

Atomic Energy Commission to sell any such equipment yourself?

A. We have not.

Q. Never have done that?

A. Not to date, no, sir.

[fol. 174] Q. So that you do not receive any funds then from monies from the disposition of either surplus or obsolete equipment?

A. We do not.

Q. What we have said about equipment, using a truck as an illustration, is that true of all types of equipment, going down to office equipment like typewriters or adding machines or desks or chairs?

A. That is true.

Q. Same method of procurement and the same method of disposition?

A. Yes, sir. We occasionally are instructed to buy small tools, tools that in the ordinary wear and tear are no good.

Q. They are consumable in use, in other words?

A. Before we do that, we have to give definite proof to the Commission that these tools are of no further value.

Q. Suppose that you need two dozen shovels of some sort, or picks or something of that type. Does H. K. Ferguson furnish them from any other job?

A. No, sir.

Q. How are they acquired, a small item of that type?

A. They are bought on a purchase order.

[fol. 175] Q. Do you advertise or does the Atomic Energy Commission or the two of you advertise for bids on various types of equipment or machinery of that sort which would be purchased, or how is it handled?

A. Under the purchasing procedure we advertise.

Q. Suppose that it is a piece of equipment to be purchased and advertisement has been made for it. Explain the procedure that is followed. How is it bought?

A. Well, depending on the estimated cost, we will say the piece of equipment costs over \$1,000. We have to go out under our procedure and get at least three bids.

We write up the specification for this piece of equipment, send this specification to the various vendors who we feel would be in a position to supply it.

We give a certain length of time for the bids to be received, depending on the need. It is usually about ten days.

After bids are received, they are evaluated as to meeting price and specifications. This evaluation is then transmitted to the Atomic Energy Commission. On their approval, we buy it.

(Discussion was had off the record.)

Q. Now, when you buy it, you issue a purchase order for it?

A. Yes, sir.

[fol. 176] Q. When the equipment, piece of equipment is received in response to that purchase order, what is done next?

A. Well, if it is not expendable, it is given an AEC number and placed on the property records.

Q. Is the number stamped on the piece of equipment itself as well as placed on the property records?

A. Stamped or stenciled, yes, sir.

Q. And, of course, then it is put out.

A. Yes, sir.

Q. How is payment for that piece of equipment handled then?

A. We are invoiced and we—

Q. You receive an invoice for it?

A. Yes, sir.

Q. From the seller, and then what is done?

A. Well, the invoice is checked against the receiving slip. We issue a check out from the general fund in payment.

Q. And that check is drawn on this Government fund account that is in the Hamilton National Bank?

A. That is right.

Q. As will appear in the exhibits.

Is any money of H. K. Ferguson used at any time in payment for any of this type of equipment?

[fol. 177] A. No, sir.

Q. Is that true regardless of what the equipment may consist of?

A. That is right.

Q. Now let's go to supplies or materials that you may use. In connection with your work you do use various

kinds of material that is consumed in the use under the contract, do you not?

A. Yes, sir.

Q. How is that material purchased?

A. A requisition is drawn up indicating to our purchasing department that we need this particular type of and quantity of materials. They in turn advertise—

Q. Wait just a moment. That requisition is drawn by Ferguson company, copy of which is included in these exhibits we hope to stipulate. And after that requisition is drawn by Ferguson, what is done with it?

A. The requisition goes to the purchasing department.

Q. Your purchasing department?

A. Our purchasing department.

Q. After your purchasing department receives the requisition, what becomes of it?

A. They advertise.

Q. What, if any, approval have you had by the Atomic [fol. 178] Energy Commission for the purchase of this material?

A. Before the requisition is initiated, we have approval of the work that we are going to do. It will be one of these jobs that are finally included in a modification. We do no requisition or buying until we do have that approval. So no further approval is required until the prices are received by the purchasing department.

Q. To what extent do you attempt to get bids from more than one person for this material which is going to be necessary to use in carrying out the directive you receive from the Atomic Energy Commission?

A. Well, it depends entirely on the type of material. Say, cement, we would go to the local sources for it. For item of stainless steel, we will probably have to go to a number of vendors throughout the country. We go as far as the far west, California, to get some items. We advertise for them.

Q. Do you have a minimum number of people you attempt to contact?

A. The minimum is three. We attempt to contact ten or twelve and even more.

Q. Let's go back to your item of cement a moment. Suppose you need a given quantity of cement, somewhere in

the neighborhood of a given quantity of cement to carry out one of these directives. Tell us exactly what you would do on that.

[fol. 179] A. Well, if I needed less than 100 bags, we would probably give a direct order to one of the local suppliers. That would be less than \$100. And under our procedure we can buy without advertising up to \$100. We know the price of cement. That is a stable item. And it is an advertised item. So we would, to save time and money, go ahead on that procedure.

If it was 1,000 bags, we would go out and advertise and go to at least five or six of the cement companies, Lone Star, Volunteer, anyone that had expressed interest or that we thought would be interested.

Q. Now having received prices from these cement people, producers, from at least three of them, what do you do?

A. Well, up to \$10,000 we do not have to get approval, if we get as many as three prices. Over \$10,000 we have to get approval before award on all purchase orders.

Q. Now let's stay under \$10,000 for the moment, and assume the value or the price of the cement you are buying is \$8,000. You get the bid of \$8,000. What do you do?

A. We evaluate the bids. We give the contract then to furnish us to the low bidder, unless he has a delivery date which is unacceptable. Then we would want to go to the next bidder. We could not go to him without getting prior approval from the Commission.

[fol. 180] Q. In other words, if you don't award it, even the amount less than \$10,000, to the low bidder, you must get approval of the Atomic Energy Commission?

A. Yes, sir. Or if we do not have as many as three bidders, we have to do the same thing. Anything under \$10,000 is audited after the fact. We are trusted up to that amount.

Q. And those invoices and checks issued therefor are audited by the representatives of the AEC?

A. Yes, sir.

Q. Suppose the amount is in excess of \$10,000 for the lowest bid of the material you are buying. What do you do?

A. We make an evaluation showing the prices quoted by each vendor, their deliveries, their discounts, and also an evaluation as to whether or not they meet the specifications.

We present this evaluation to the Commission. If they approve the low bidder, we issue a contract to the low bidder. If they—

Q. You mean if the Atomic Energy Commission approves it?

A. Yes, sir. If for some reason they decide that he isn't qualified, we go to the next bidder. And on some occasions we throw out the entire bids and go out and re-bid, depend- [fol. 181] ing entirely on the Commission's ruling. On our recommendation—of course, we recommend.

Q. You make a recommendation, but the AEC makes the approval or disapproval?

A. Directly. Entirely.

Q. If approved by them, then you issue an order form for it?

A. We do.

Q. Do you receive an invoice?

A. Yes, sir. This contract which we give or the purchase order is signed by our purchasing agent and by a representative of Mr. Bonnet's office, either Mr. Bonnet or one of his representatives, countersigns it.

Q. Wherever the purchase is for an amount in excess of \$10,000, the purchase order is signed by a representative of the Atomic Energy Commission as well as your purchasing department?

A. It is.

Q. You receive—you, the Ferguson company, receives the invoice for the material when it is received?

A. Yes, sir. We receive the material. We make receiving slips for it, and we receive the invoice.

Q. What do you do with the receiving slips you make for it?

A. The receiving slips are turned over to the accounting [fol. 182] department so that they can check them against the invoice.

Q. How are these invoices paid?

A. They are paid by check from the general bank account.

Q. Given by Ferguson on this general bank account that is in the Hamilton National Bank?

A. Yes, sir.

Q. There are copies of those also in these exhibits.

What is done about auditing these purchases, these receipts and invoices, and so on, by anybody connected with the Atomic Energy Commission?

A. They are periodically audited. All of them are audited.

Q. Are any part of these materials that you receive used for any other purpose except the work under your contract at Oak Ridge?

A. No, sir.

Q. Are any of them ever shipped to any other job that Ferguson may have somewhere else?

A. No, sir.

Q. Or shipped to your home office or home base?

A. No, sir.

Q. Do you carry on the books at Oak Ridge any assets of any kind of The H. K. Ferguson Company?

[fol. 183] A. No, sir.

Q. So far as you know, does the home office of Ferguson carry on its books any of these properties that are located at Oak Ridge?

A. They do not.

Q. Now does your home office carry on its books any liabilities for payment of invoices that are out at Oak Ridge?

A. No, they do not.

Q. So that the properties at Oak Ridge are neither considered as an asset nor a liability of the Ferguson company?

A. They are not.

Q. Who designated or arranged for the type of forms you used—like for order forms that are used in acquisition of properties at Oak Ridge?

A. The form was designated by the Commission. They asked us in our proposal to indicate how we would procure and gave us their manuals as guide, and we drew up them.

Q. Have you followed the suggestions of the Atomic Energy Commission at all times in the forms you have used?

A. To the best of my knowledge, we have, yes, sir. I know of no case we have not.

Q. Does the Ferguson company consider itself at any

[fol. 184] time as the purchaser or owner of the materials or equipment that are bought for this Oak Ridge job?

A. We do not.

Q. To whom do you or in whom do you recognize ownership of that?

A. The Atomic Energy Commission.

Q. Is there any insurance of any kind with loss payable to Ferguson carried on any machinery or equipment in Oak Ridge that you know of?

A. There is not. None.

Q. Do you purchase from time to time what we might class as ordinary building materials to be used in connection with your operation under the contract, and I refer to ordinary rough lumber or nails or roofing materials or concrete blocks, things of that sort?

A. We do.

Q. In large or small quantities, and tell us generally about it.

A. Well, we attempt to estimate our needs for perhaps a six months period. We go out on requisition for open-end order, on some occasions. On this open-end order we can have it delivered as we require it, the various items. In other instances, say, tile, building tile, we will buy perhaps two carloads and stock them. We do this because in our alterations work we have to match the existing block. This [fol. 185] is stocked. We use it. If Carbide is pursuing some work that they do need it, they can requisition from our stock.

Q. Now if you purchase two carloads of tile, do you follow the same procedure in the purchase which you have heretofore outlined?

A. Strictly.

Q. In handling the receipt of the material and paying for it, do you follow the same procedure you have heretofore outlined?

A. Exactly.

Q. You say that some of this material, tile or others, may be requisitioned by Carbide?

A. It can be.

Q. And if that is done, what happens to it?

A. It is delivered to the Carbide personnel requisitioning

it. The requisition comes through the Commission, but they take it and use it in their particular work.

Q. What do you do with your inventory records then when Carbide gets the material you have had in your listing?

A. They are billed for it.

Q. And any money paid by them to you for it?

A. No. No exchange of money. It is a book transaction [fol. 186] entirely, in the Commission, and we in turn obtain material from them on the same basis. Especially if it is rush or something that is difficult to procure.

Q. You spoke earlier this afternoon about getting equipment and nails or tools or something from GSA.

Do you get any of this building material from GSA also, General Services Administration?

A. Items like nails. We do. That is one I am thinking of now. We get lists and we constantly look these lists over to see what GSA can supply us.

Q. Suppose you needed some nails of a certain type, kind, size, and you looked over the list and found that somebody had those in the Government set-up, GSA, that are available. What procedure do you follow?

A. We go through the requisitioning procedure and issue the requisition, get approval of the requisition from the Commission. The Commission then forwards that—takes care of the paper work or until it is delivered to us.

Q. In other words, do you deliver an order to some other governmental agency for those or is that done by the Atomic Energy Commission?

A. It is done by the Atomic Energy Commission.

Q. Do you know whether there are any instances where you do send them directly to the General Services?

A. I am not sure on that point. That point is handled [fol. 187] by a man designated under our purchasing agent. And I do not go into that detail.

Q. I will use him on that. I want to get back a moment to the contact that the Atomic Energy Commission has with your operations. You stated that there were a number of engineers and employees of the Atomic Energy Commission that were assigned to overseeing or looking after your work. To what extent do they keep in contact with your day-to-day operations?

A. Well, I would say it is hourly contact.

Q. What do you mean by that?

A. Well, they are with us practically all the time.

Q. What do they do when they are with you?

A. Well, they ask questions, making suggestions and checking on schedules, and sometimes wondering why this man over here isn't working as hard as this man over here, or something to that extent. Also giving advice, helpful advice, at times.

Q. Where are these people stationed as far as their offices are concerned? Let's start first with Mr. Bonnet and then the engineers. Where are they located with reference to your work?

A. In the same. We are in the same building.

Q. In the same office?

A. Based in the same building, yes, sir.

[fol. 188] Q. What do they have to do with the number of personnel that you have employed on a job?

A. Well, non-manual I cannot employ or discharge anyone without permission from Mr. Bonnet.

Q. In other words, you mean on the non-manual classification you have to get his approval before you can either employ or discharge anybody that is working there with you on the job?

A. That is the agreement which we follow, yes, sir.

Q. And you follow that strictly?

A. Yes, sir.

Q. How many employees, if you can tell us, back in November, 1956, or other periods, were there there working on the Ferguson contracts? About how many at any period?

A. I would say in '56 we averaged around 300. This was before the Modification 5 started which was the big increase. Out of that total about 50 were non-manual 250 would be men of different crafts.

Q. Perhaps it is not too material to this lawsuit, yet it may be. What would you say is the peak that you have had, and after you once got in operation, what is the low number you have had employed on your job out there?

A. I would say the peak was around 1500. The low number would be around 125.

Q. Suppose that someone on this job is doing something [fol. 189] that doesn't meet the approval of the AEC per-

sonnel there. How do they communicate with reference to their dissatisfaction with the type of work this man is doing?

A. As a rule it is verbal.

Q. To whom?

A. To myself or the man directly under me.

Q. What do you do? Tell AEC to go to thunder, or what do you do?

A. I look into the case. If we can't agree, why, then before I take any further action, I insist on a letter so that it will be on the record. So far I don't think I have received a letter.

Q. Who generally caves in? You or the AEC?

A. Well, I am kinda stubborn, so I think it is probably a 50/50 case.

Q. Do you ever take anything with reference to this work to Mr. Bonnet to review your ideas on it, and, if so, what kind of matters would you submit?

A. We are in daily contact on various methods of procedure to follow in the various types of work. I also discuss with his assistants the feasibility of following one line against another line of work, the economy of it. Sometimes we have to sacrifice economy for speed. Those items of that type are discussed frequently with them. We have a free [fol. 190] interchange of ideas.

In fact, sometimes I don't know who I am working for, until I get my pay check and then it is Ferguson.

Q. What about control of overtime for your employees? That is, manual employees? What do you follow?

A. We have an agreement with manual employees I can work eight hours beyond the 40 hours. That is 40 hours is straight time. Eight hours would be overtime. Anything beyond that I have to get written approval.

But we do follow the procedure on any overtime I inform Mr. Bonnet of the AEC that we are going to work and explain the reason for it, to get his approval. Sometimes it is after the fact. It is an emergency. But he is always informed and approves.

In the case of the non-manual, I get approval in advance before I work.

Q. To what extent, if at all, do you check with the Atomic Energy Commission representatives, Mr. Bonnet or his

men, on various labor matters? Say, collective bargaining or adjustments in men.

A. We keep them appraised at all times of any labor disputes or pending labor disputes.

Q. I believe that just recently, as an illustration, you had a labor disagreement there and picket line and so on. Did [fol. 191] you take any steps with reference thereto, and, if so, did you get any consent of the Atomic Energy Commission before doing it?

A. Yes, sir. We tried to settle the dispute without litigation. The picket line was becoming a nuisance to the Commission. So Mr. Bonnet asked me would I object to taking legal procedures and getting an injunction. I told him I had no objection.

He suggested that I check with my home office and see whether they felt it would have a bad effect on them, which I thought was a very decent thing for him to do. Anyway, I agreed and proceeded to start the legal ball rolling.

Q. On advice of him you did institute litigation?

A. Yes, sir, in our name. And we have kept them appraised of the whole thing.

Q. Of all steps that were taken?

A. All steps taken.

Q. With their approval?

A. And in the letter authorizing the legal work be done, I stated that this was with the permission of the Atomic Energy Commission, so that you would be sure of getting your money, so I wouldn't have to pay. You would be sure of getting it either way.

[fol. 192] Q. In the preparation of papers that were filed in connection with that case, were representatives of the Atomic Energy Commission present?

A. They were.

Mr. R. R. Kramer: You may cross examine.

Cross-examination.

By Mr. Rice:

Q. Going back just a little bit, Mr. Comer, The H. K. Ferguson Company is a large contracting concern, is it not?

A. Yes, sir.

Q. Does it operate on a nation-wide scale?

A. Nation-wide and international at times.

Q. Does it do all types of construction or any specialized types?

A. It specializes in building construction, more in the industrial and chemical fields.

Q. Is a large share of its work done for the Government or for government generally? That would include within that state and local governments as well as Federal.

A. I wouldn't say a large share. I would say during certain periods that it is. Like the period of, oh, 1940 through '50, it was doing a large share of the work for the Government. But right now I know of only one job that we have—two jobs that we have that are in any way connected with [fol. 193] the Government.

Q. One of those would be your Oak Ridge endeavor?

A. Two others.

Q. Two others besides that?

A. We have some work for the Commission at Idaho Falls. We have some work for Convair out at one of the missile bases in Nebraska.

Q. Is the work of The H. K. Ferguson Company confined generally to large projects, or do they take them of all sizes?

A. No, we take them of all sizes. It isn't economical for us to get down in the, say, the \$100,000 class. We are out of competition there. But I would say from a quarter million on up we are interested in.

Q. And you do that anywhere within the United States or certain foreign areas?

A. Yes, sir.

Q. You have been in the picture at Oak Ridge, I believe it has been stated, since 1953 or 1956?

A. I came here in '55.

Q. I mean the Ferguson company.

A. The H. K. Ferguson Company has. I came here shortly after they moved in. I was here on the first work that, actual work that we did, other than our organization.

Q. It has been stated you maintain here anywhere from [fol. 194] 300 to 400 employees up to possibly 1500, depending on the amount of work to be done, and nature of the work to be done.

How many people would you say are maintained here constantly who never leave, who are on your payroll twelve months a year?

A. Oh, I would say salaried people would be around 70, non-manual. Craftsmen we average—we would average 200.

Q. What is this figure 70 again? I didn't quite get that.

A. Salaried.

Q. They are salaried people. Are they just clerical?

A. Administrative, engineering, and supervision, salaried supervisors.

Q. All of your manual people—how many would you maintain of those here constantly?

A. We maintain those as the work load—

Q. You do have a certain minimum number though?

A. Well, I will say it hasn't fallen below this minimum. It could fall below the minimum. If the Commission did not give us directive to do the work, why, we would automatically cut these, terminate these people.

Q. The work you have planned for the foreseeable future [fol. 195] would keep that number of people busy?

A. For the next year.

Q. You couldn't go beyond that?

A. That is as far as I can see. I would feel fairly safe in making that statement.

Q. If it ever fell below that figure and stayed there for any very lengthy period of time, there might be some question as to whether H. K. Ferguson would remain, whether there would be enough work for them to do? Would that not be true? Would it not be a fair statement?

A. I think they would remain here so long as they satisfied the Commission's requirements. But whether they would keep me here is a different—I will put it that way. They would probably reduce the force.

Q. If the need for a contractor of the H. K. Ferguson type, if the work load ever fell below that minimum and stayed there very long?

A. This would have to be my own opinion.

Q. State it any way you want to.

A. I would say that as long as Oak Ridge operates, as long as the Atomic Energy Commission operates under the management type, using Carbide or someone of that type,

there will be a need for construction group doing the work that we now do. It could be on a very small scale, but it will have to be.

[fol. 196] Q. Do very many of your manual type workers have permanent homes in Oak Ridge or vicinity with the expectation of remaining there for the foreseeable future?

A. I would say 99 per cent of them are from this area, and own—quite a few of them own homes in this area. They would be following construction work in this area. They want to work in this area.

Q. What sort of people, Mr. Comer, has H. K. Ferguson brought here from elsewhere and established in Oak Ridge to assist in the performance of its contract?

A. We have brought them—what we call the key personnel. Myself, of course. My deputy. We have a chief engineer. We have a chief purchasing agent. We have an assistant purchasing agent. We have a chief estimator. We have several resident engineers. These people were brought in.

Q. They are all professional people?

A. They are. Yes.

Q. Where were they brought from? Cleveland?

A. Not directly from Cleveland. From our Cleveland roster. My deputy came here from Muskogee, Oklahoma, but he had been working for Ferguson for a number of years, so he came here, was on assignment there. And I have one coming in today that came in from Cleveland.

Q. They have been connected with H. K. Ferguson for [fol. 197] some time previously?

A. Yes, sir.

Q. Do you very often, or have you ever had the occasion to transfer somebody from here to the site of some other job which H. K. Ferguson is performing?

A. I have transferred out, the main reason being the reduced work load.

Q. Are you ever ordered by your home office at Cleveland to transfer some key person who is here to some other project the company is working on?

A. No.

Q. You are not?

A. No.

Q. Have your key personnel had experience with H. K. Ferguson elsewhere?

A. With the exception of perhaps two or three, they have.

Q. Those you have here generally you expect to keep here as long as they stay in the employ of Ferguson or as long as your contract continues here with the Atomic Energy Commission?

A. As long as they are satisfactory to the Atomic Energy Commission.

Q. But they won't be transferred anywhere else so far as you have any reason to believe during the term of this [fol. 198] contract?

A. No, sir.

Q. It has not been a policy then of H. K. Ferguson to shift people back and forth between various projects that it may be working on?

A. No.

Q. All right, sir.

A. Let me qualify that.

Q. Go ahead.

A. On this project. Now we do shift on some projects. But this particular project, we do not. The men are screened when they come here. They have to pass the approval of the Commission, and that is a rather difficult job at times to get. I have had at least on some particular assignment, I have had five or six men in here that did not meet the approval of the Commission.

So when I get them in here and they meet their approval, why, I am going to keep them in here as long as I have work for them to do, as long as the Commission has work for them to do.

Q. In carrying on your work at Oak Ridge, your manual workers work under the supervision of your own supervisors, do they not?

A. Yes, sir.

Q. They are not subject to the supervision and control [fol. 199] of Carbide or of AEC or anybody else up there? I mean nobody gives them orders except you and your people?

A. No one gives a direct order to a man handling a torch or handling a wrench or pick or anything like that, no.

Q. He isn't responsible to anybody except his own straw boss or supervisor within your own organization?

A. That is right.

Q. All complaints regarding the way work is done go through channels, do they not?

A. Yes, sir.

Q. Up to you and then to AEC or whoever else may be interested in it?

A. Well, the complaints usually come the other way. They come from AEC to me down to the channels.

Q. Wherever it may originate, either AEC or down at the lowest level of your own employees, it will come through you?

A. That is right.

Q. Are your employees organized in a labor union?

A. Yes, sir. They are members of the American Federation of Labor building trades.

Q. If a labor dispute arises, to whom is the grievance taken?

A. It is taken to me.

[fol. 200] Q. It is taken to you.

A. I have a personnel and labor relations officer who is between me and the actual complaint.

Q. And the complaint will come through a shop steward, will it not?

A. It will.

Q. In the union. Now is AEC brought into it every time that a dispute of any kind arises, or do you settle some of them yourself by negotiations with the union representatives?

A. We settle, I would say, 90 per cent of them without AEC even knowing about it until after it is over. But we keep a running file and keep them informed on all cases.

Q. But you have complete authority as far as AEC is concerned to do that, to adjust these disputes insofar as it is possible for you to do it?

A. I am expected to unless it involves money or delaying the work or change of schedule or something. If it involves a change in schedule or money, why, I cannot take any action until I have consulted with the AEC.

Q. If it is a matter simply of working conditions though

that doesn't involve those things, you could and would settle that yourself if it was possible to?

A. Yes. We have—working the AFofL trades, we have [fol. 201] jurisdictional disputes occasionally—what particular trade will do a particular phase of the work. We settle those without—sometimes settled in five minutes right on the job by our supervisor. If it goes farther, it comes up to my office, why, a record is made, and the Commission is informed. Immediately after, if it goes so far as a work stoppage, in five minutes after the work stoppage, I am in Mr. Bonnet's office informing him or one of my people are.

Q. Do you carry workmen's compensation on your employees there?

A. Oh, yes.

Q. In the event one of them is injured, then he is paid either by you or your insurer as the case may be?

A. He is paid by the insurer.

Q. And if there is any dispute about the thing, it has to go to court, suit is brought against you?

A. Yes, sir. And the suit is brought against us.

Q. And however it may be resolved, you abide by it. Does AEC have anything to say about that at all?

A. They are kept informed, and if we need additional assistance, they will give us that assistance.

Q. What do you mean by assistance? Financial?

A. Yes. And they carry the insurance premium. They actually pay the insurance premiums.

Q. But they are paid in your name, I assume, or in the [fol. 202] name of H. K. Ferguson Company?

A. Yes, like any other—the same category as paying an invoice for a piece of equipment or piece of material. It is paid out of the same bank account, the general bank account set up in the Government's name, under our contract number.

Q. An injured employee wouldn't ever deal with the AEC as to a question of liability for his injuries, would he?

A. I would say that his first approach would be to us because he is working directly—his pay check is signed H. K. Ferguson Company.

Q. Actually except as a matter of handling premium would there be any practical difference between the way

a thing like that is handled in the case at Oak Ridge and in the way it would be handled if you were working on a project for the Shell Oil Company?

A. We would report it to the insurance company the same way.

Q. Do you pay social security taxes with respect to your employees?

A. Oh, yes.

Q. You withhold from their salaries, too, for Federal income tax purposes?

A. We do. But as I previously testified, the checks [fol. 203] covering that are made on the Government account in our name.

Q. How do you go about obtaining new employees, manual employees when you need them, when the work load increases?

A. Well, say we need a new man and a new person in the accounting department. My chief accountant writes me a memorandum explaining the need, why he thinks he should have additional personnel.

I either concur or disagree with him. I take a copy of his memorandum. I add to that and write to Mr. Bonnet, Director of Construction, asking his concurrence or disagreement on employing an additional person.

Q. That is in the professional category, however. The non-manual type employee—now what about manual: Suppose you need 100 carpenters.

A. Well, I go over my work load; outline the need of these men, how long I think I will need them, and then follow the same procedure. Go in to Mr. Bonnet's office, tell him what I need.

He in turn will call in his area engineer who is over that particular phase of the work and get his advice on it. And he will tell me I can employ these men or he will re-schedule the work where we don't need the men. But I do not employ them until I get permission.

[fol. 204] Q. How do you go about engaging the services in either category, manual or non-manual?

A. Engaging these people?

Q. Yes.

A. Non-manual, we take them, of course, from our applications. If we don't have people that have applied, we

go out and advertise or go, have someone in the organization suggest people to come in to be examined.

For manual, we hire through a recognized legal hiring hall.

(Discussion was had off the record.)

Q. A hiring hall is something maintained by a union?

A. Yes. I don't know the total—I don't know the entire legal, but I know that we are legal in what we are doing.

Q. I wasn't suggesting to the contrary.

(Discussion was had off the record.)

A. We do take, to make foremen we take the most skilled men we get and the best men, and we move them up to foremanship on the manual side, but we do not get our supervisors.

Q. Do you enter into contracts with the union?

A. We do not negotiate with the union on contracts. We take the established contract for the area, submit it to the [fol. 205] Commission for their approval, as far as wages and fringe benefits and so forth are concerned, and on their approval we agree to abide by such existing area contract.

(Discussion was had off the record.)

Q. Would it be a fair statement to say then that any and all negotiations with labor or with labor organizations are carried on by H. K. Ferguson Company rather than AEC?

A. I would say a fair statement would be that we carry on the negotiations as agents for the Atomic Energy Commission. Any action we take is subject to their approval.

Mr. Rice: That's what this lawsuit is about. I believe that's all.

Redirect examination.

By Mr. R. R. Kramer:

Q. Mr. Comer, have you worked for H. K. Ferguson Company on other jobs where the company was operating as a lump sum contractor?

A. On a number of them, yes, sir.

Q. Any of them where they were lump sum contractors for the Atomic Energy Commission?

A. Indirectly. The Atomic Energy Commission was a prime contractor. Our contract was a sub-contract under their general contractor.

[fol. 206] Q. In other words, they had awarded a general contract to somebody else, and your company was a sub under it?

A. Yes, sir.

Q. Were the procedures for procurements handled in the same manner on that job that they are on this job out there?

A. Oh, no. There was no comparison.

Q. Would you explain a little more fully what the difference was.

A. Well, this particular job that I am speaking of was Portsmouth, Ohio. Kiewit Company was the prime contractor under the Atomic Energy Commission. The H. K. Ferguson Company, under competitive bidding, received a contract for the procurement and erection of a specified building.

The procurement of materials of sub-contractors was strictly our responsibility. The criteria set up was that we had to meet specifications and give a completed job on schedule to meet the requirements of our contract.

The Atomic Energy Commission inspected our work only to assure themselves that we were meeting specifications. That's it.

Q. They did not control as they do on this job at all?

A. They made no attempt to control.

[fols. 207-209] Mr. R. R. Kramer: That's all.

Mr. Rice: Nothing further.

[fol. 210] WILLIAM A. BONNET, being first duly sworn, was examined and deposed as follows:

Direct Examination.

By Mr. R. R. Kramer:

Q. This is Mr. W. A. Bonnet?

A. Yes, sir.

Q. How old are you, Mr. Bonnet?

A. I am 51.

Q. Are you in any wise connected with the Oak Ridge Operations Office of the United States Atomic Energy Commission?

A. I am.

Q. In what capacity?

A. My present title is Director of the Construction Division.

Q. How long have you been connected with the Oak Ridge Operations of the Atomic Energy Commission?

A. I have been in Oak Ridge, connected with the operations at Oak Ridge since October, 1943. Of course, the Atomic Energy Commission took over responsibility in January of 1947.

Q. You were with the Manhattan District in the Oak Ridge Operations before that?

A. Before 1947, yes, sir.

Q. Have you held the same position all this time, since [fol. 211] January, 1947?

A. No, sir.

Q. Explain, will you, please.

A. In January, 1947, I was connected with the operations of the community and remained in that position until early in 1952 when I was assigned to construction work. And I have been in the construction phases of the Government work in Oak Ridge since 1952.

Since January, 1954, I have held a position similar to that which I now hold. In January of 1954 I was designated as Director of the Area Construction Division with responsibility as the principal AEC representative on all construction work in Oak Ridge.

More recently, some five or six months ago, I was design-

nated as the Director of the Construction Division, and in that capacity my sphere of activity extends beyond the local Oak Ridge area.

Q. What is your educational background, Mr. Bonnet?

A. I graduated with the degree in civil engineering from Northwestern University in Evanston, Illinois, in 1933.

Q. Did you follow work in the engineering field between the date of graduation and date you came to the Manhattan District?

A. Yes, sir. Since that time I have been continuously engaged in engineering or construction in one phase or [fol. 212] another.

Q. What, if any, responsibility do you have in connection with the administration of the H. K. Ferguson contract that is involved in this lawsuit?

A. I have been designated and am the contract administrator of this contract.

Q. What is the duty of the contract administrator?

A. He is the principal representative appointed by the AEC to administer a contract of this type. In this capacity he is the chief contact between the Commission and the contractor on all matters involving the performance of the contract by the Ferguson company.

Anything the Commission wants to take up with the contractor, they take up through the contract administrator. Any problems or approvals which the contractor has which require action by the Commission in like manner are taken up through the contract administrator.

Q. Do you have a staff that works under you as employees of the Atomic Energy Commission? And, if so, explain briefly.

A. Yes, sir, there are a total of some twenty people, including myself, in the Construction Division. This number has not varied materially during the last four or five years.

Q. What type of employees are those? Clerical or engineering, or what are they?

A. They are 15 men and 5 girls. The girls, of course, are clerks and stenographers, which leaves 15 men. Of these 15 they are all engineers save one, who is designated as an administrative officer.

Q. Of course, you have your office out of which you oper-

ate at Oak Ridge, and how is it located with relation to the office of The H. K. Ferguson Company?

A. My office and my headquarters and the offices of all of my staff are located in the same building designated as 9720-6, which is at the east end of the Y-12 plant. We are under the same roof and use the same facilities as The H. K. Ferguson Company.

Q. You were familiar, I take it, with the awarding of the contract to The H. K. Ferguson Company?

A. Yes, sir.

Q. Will you state briefly under what circumstances and why such contract was awarded?

A. Prior to 1955 the Government had always had in Oak Ridge a rather large construction program of some type or other going on. This is ever since 1942. This involved the construction of the electromagnetic plant, the gaseous diffusion plant, and additions to these plants.

We had such contractors as Stone & Webster, J. A. Jones, Maxon Construction Company, Rust Engineering [fol. 214] Company, who had specific assignments to construct these major operating facilities.

During these years from 1942 to 1955, when we had alterations or revisions to be made in the operating plants, we called upon these principal construction contractors who were already organized, and, in fact, working considerable number of men in the Oak Ridge plant areas, to perform this miscellaneous, what we call miscellaneous construction work, principally alterations in the plants.

But late in '54, we knew that there were no further large construction programs planned for Oak Ridge, and, therefore, we really would have no need for a large continuing organization such as we had for some twelve or thirteen years.

At this time in late '54, the Commission decided that rather than continue one of the large construction contractors in Oak Ridge to perform this miscellaneous work, we would solicit proposals from national contractors to perform this miscellaneous construction work on a two or three year contract.

So that early in 1955 the Commission did solicit proposals from some 15 or 20 national contractors. The work

was defined as miscellaneous construction work which would involve some new construction, but which would involve principally alterations to existing plant facilities. [fol. 215] I believe the work was further described as consisting principally of installation of machinery and equipment and rearrangement of machinery and equipment, installation of electrical, heating, and ventilating and process systems.

The work was further described as estimated to involve a dollar volume of between \$3,000,000 and \$6,000,000 per year.

As result of this solicitation of proposals from some 15 or 20 contractors, The H. K. Ferguson Company was selected, and a contract was entered into with Ferguson, as I recall about August of 1955.

Q. Copy of that contract has already been filed as Exhibit F-1 in this case. And this contract shows on its face that it is for a three year period, and you have so mentioned in your testimony.

Was that contract later extended?

A. Yes, sir. That contract ran for three years and was later extended and now runs to July 1, 1963, I believe.

Q. You have stated generally the type of work that was to be included when you requested these bids, so that the bidder would know what was expected of him if he were awarded the contract.

Can you now, without too much detail, tell us generally the type of work that Ferguson has done under this contract [fol. 216] and especially during the years 1955 and 1956?

A. You are speaking of the calendar years '55 and '56?

Q. Yes.

A. We think generally in terms of fiscal years.

Q. What is your fiscal year '55? What calendar months does it cover?

A. It would run from July 1, 1954, to July 1, 1955.

Q. Then your '56 would run from July 1, '55, to July 1, '56?

A. Yes, sir.

Q. During the calendar years 1955 and 1956, forgetting fiscal years for the moment, tell us generally the type of

work that Ferguson performed under this contract, please, sir.

A. The work performed by Ferguson generally followed that which we have described and predicted in our solicitation of proposals from these national contractors which I mentioned earlier, and that is that it was principally alterations to existing plant facilities.

Actually most of the work performed by Ferguson was in our electromagnetic plant. I think this is understandable because this plant was built for one purpose, and what we know as electromagnetic process of separating U-235, and then this system was discarded in favor of our gaseous [fol. 217] diffusion process, so that the facilities in Y-12 and buildings and utilities there have been altered to serve different purposes in the AEC program.

For example, we would leave the shell of a building but strip out all of the equipment and the process piping inside of the building and replace it with new equipment and piping or with equipment taken from some other building in the plant area, or in fact we shipped in considerable equipment from AEC plants at some distance from Oak Ridge and installed them.

Q. They took equipment that you would ship in from other plants of AEC already owned by AEC. And during the period of Ferguson's contract, what was Ferguson directed to do or what did it do with reference to such shipped in equipment? Did it install it, or did it alter the equipment, or what did it do about such equipment?

A. Well, a typical example would be heavy machinery, tools, big lathes, and drills and presses, and so forth. This equipment was owned by the Government, shipped to Oak Ridge by the Government.

Ferguson would receive it, unload it. Then, of course, it had to be cleaned and disassembled and reassembled, tested to see that it operated at proper tolerances, and reconditioned and installed on the foundations which had been prepared by Ferguson.

[fol. 218] The service connections, of course, would have to be made, electric, gas, air, oil, in some cases hydrogen, nitrogen, and so on.

Q. And Ferguson and its employees would do that work?

A. Yes, sir.

Q. What about alterations of buildings, and so on? Were any made under the Ferguson contract? And describe in general terms what would be done by them.

A. Generally, as I mentioned earlier, we were using existing buildings which had been constructed for one purpose and then were to be stripped of their facilities and used for another purpose. So in effect we would keep the shell of the building, the walls, and the floors, of course, and the roof; but then the complete interior would be stripped of any equipment or process piping or utility services, and new ones would be installed by Ferguson.

This involved removing concrete foundations and replacing them with new foundations. It meant removing utilities in total or in part. Quite often it was impossible to determine the condition of the piping or electrical services that were installed during the war, and sometimes only a part of it would be removed. Some of them would be found to be in pretty good condition, and, of course, we would save these, leave them in place and re-use them. Sometimes [fol. 219] the entire piping system or electrical system would have to be removed.

Q. Why didn't you, or the Atomic Energy Commission, ask for bids and award lump-sum contracts for this type of work that you have just been referring to, the alteration of these buildings or the cleaning and reinstalling of machinery and other items of that sort?

A. Well, of course, there are a number of reasons. Sometimes all of the reasons would apply. Sometimes only two of the several reasons would apply.

Q. Explain what these reasons are, please.

A. The reasons would in many cases be where the work could not be accurately described so that a lump sum contract could be advertised and awarded. In other words, definitive plans and specifications could not be prepared.

Q. Why?

A. This is because you do not know the condition of the existing building and services to that building until you get in there and start tearing them out. And, of course, it would be impractical to provide that all of them would be torn out when you started removing the piping and the conduit and the electric wiring and found out that some of

them were in very good shape. You want to save this money.

So in these cases, which were very common, it would be impossible to develop definitive plans and specifications [fol. 220] so that a bidder could bid on them.

Another reason, in some cases, a number of cases, part of the building would continue in operation. These are very large buildings. And part of the buildings would continue in operation by Carbide. And, of course, when you are cutting electrical services or water service, you have to be very careful as to not-disrupt the program of the operating contractor.

And here again we consider it impractical to award a lump sum contract and not be able to tell the lump sum contractor exactly how many hours a day or days of the week he can work in a particular area, because we may have to instruct him to discontinue his operations, his operations under his construction contract because of some requirement of the operating contractor.

Another element entering into decision to assign work to the Ferguson company was the time element. Quite often we were in the position of having to make alterations in these buildings on a very fast schedule. We just didn't have time to develop plans and specifications, go through the process of advertising and awarding a lump sum contract.

Q. Was that element of time essential for the activities and work of the Atomic Energy Commission?

A. Yes, sir. This is where the Commission at Oak Ridge [fol. 221] would be assigned a certain program to perform by a given calendar date, and the alterations to the plan had to be in time to meet these program requirements.

Another element in assigning work to Ferguson is from time to time work must be done in what we call contaminated areas. These are areas where there may be radiation or other contamination from the processes out there. These working conditions cannot be described because they vary from day to day, and from week to week, cannot be described to our mind so that a lump sum or fixed price contract can be advertised and awarded.

Q. Is it essential for both working in a contaminated area or involving contaminated equipment or properties that extreme caution and care be taken? And, if so, why?

A. Yes, sir. And the reason for this, of course, is for the protection of the individuals working there.

In these situations we issue such instructions to Ferguson as to the type of clothing they must wear, which involves covers for their shoes, and gloves, coveralls, in many cases involves specific instructions as to bathing before going to work and after completing their work; specific instructions as to not smoking in a particular area, because this means they may have some intake of contaminated material; not eating in a particular area.

And, of course, these rules, work rules, vary, as I said, [fol. 222] from day to day and week to week.

They are continually monitored by members of the Health Physics Department of the operator so that we are sure that adequate rules are set up for the construction contractor's employees, but that they are not so rigid as to increase our construction costs unnecessarily.

Q. Speaking generally now, without getting down to specific items, some of which we will come to later, how closely does the Atomic Energy Commission, through you and your division thereof, supervise and direct the work performed by Ferguson and its employees?

A. I think a general answer to that is that we supervise them very closely.

Q. Is it a day-to-day supervision and direction, or what is it?

A. Yes, sir, I would define it as a day-to-day supervision.

Of course, we give Ferguson as our general instructions what we call the AEC manuals. This gives them the policies and procedures which we want and instruct them that they must follow.

And from time to time we conduct audits by not only my group of employees but by the specialized staff of AEC, such as fiscal, property, personnel, equipment, offices, and so on, to see that these policies and procedures which we have [fol. 223] defined to the contractor in our manual issuances are followed.

In addition to this review by the AEC, we have the day-to-day review by the members of my staff who are out in the field more than half of the time, reviewing the work being done by Ferguson.

This involves how many men are assigned to a particular

task, how many carpenters or fitters; whether we think they have too many fitters, steamfitters, assigned to this job or whether they are more badly needed over on some other job; whether the sequence of the work being done by Ferguson is the most efficient; in other words, whether the piping work should all be completed before the electricians move in to finish up with their electrical connections and the installation of control systems.

Q. Suppose you find more men on a particular job than you think should be there—your men do. What is done?

A. My representative talks to the superintendent on the job and gives him his views that there are too many fitters there, that they are more badly needed over on some other job. And if the Ferguson superintendent doesn't follow the suggestions or instructions of my men, then, of course, it comes to me, and I issue written or formal instructions to Ferguson to remove the men from this job and give greater emphasis over to B job or C job rather than A job.

[fol. 224] In addition I think it would be well to point out that we have a regularly scheduled weekly roundtable meeting with Ferguson, where my men are in there and the Ferguson superintendents are around the table, discussing each job that Ferguson has going on, and giving Ferguson our desires as to which job should be discontinued for a time or which job should be emphasized, and where additional manpower should be assigned in order to meet a specific completion date, and giving them new completion dates, of course, because the emphasis of this work changes in many cases on a weekly basis.

In other words, "the operator comes and tells me, and the operating contractor says, "I have to have this job done; instead of September 1st, I have to have it done by August 15th."

And these instructions are passed on to Ferguson.

Q. You used the word "desires," expressing "our desires" as to which particular work should be done first and so on.

Do you mean indicating a wish they should do something before they do something else, or what is the eventual determination?

A. Our language, when we use the word "desire" in a letter or verbally to Ferguson, it is in the sense of an in-

struction to them. When we write a letter to Ferguson with "I think it is desired that you do so-and-so," we mean, [fol. 225] and they interpret it as such, that they have an instruction for them to do so-and-so.

Q. In other words, you mean for them to do it?

A. Yes, sir.

Q. And do they, that is, Ferguson, follow these "desires" or directions as thus given to them?

A. Yes, sir. We usually write a letter, write to a contractor and say, "It is desired, we wish you would do so-and-so," and if by some chain of circumstances he doesn't do it, then we, of course, write them another letter and tell them he is instructed to do so-and-so, and if he doesn't then that he will be in violation of his contract. But this has never to my knowledge been necessary.

Q. The Union Carbide Corporation is the operating company on the Oak Ridge area, I believe. That is, the processing and production company of the materials out there, is it not?

A. That's right, sir.

Q. Does Union Carbide Corporation initiate the requests for the work that is being done by Ferguson, or does the Atomic Energy Commission initiate the request for the work ordinarily being performed by Ferguson?

A. Ordinarily the work to be performed in the operating areas, plant areas, is initiated by Carbide. However, there [fol. 226] are many instances where work programs are initiated directly by the AEC.

The day-to-day alterations, renovations, in the operating plants are generally initiated by Carbide.

Q. Explain in what manner these requests or these initiated projects are handled, please.

A. If they are small projects—

Q. By that, what do you mean?

A. These were defined during this period of '55, '56, and '57 as jobs involving an expenditure of less than \$20,000.

These small jobs were initiated by Carbide, the request for these small jobs were initiated by Carbide, came directly to me, and then I issued instructions to Ferguson.

During this period on the larger jobs, those over \$20,000, Carbide through their contract administrator in the AEC asked for what we call a directive, and in this Car-

bide would explain the reason why the job should be performed, and rough time schedule as to the time requirement, the time in which the job should be performed, and asked through the AEC representative for the Oak Ridge Manager's concurrence that this work be performed.

And when the Manager concurred in this, then what we call a directive was issued jointly to Carbide and to me as [fol. 227] Director of Area Construction Division:

Q. By whom?

A. By the Manager of the Oak Ridge Operations.

The reason for this being jointly issued is that in almost all cases some of the work involved in the project, as we call it, would be performed by Carbide and some of the work would be performed by construction forces. And I received this directive, and then I in turn issued instructions to Ferguson.

Q. When a request was given for some given piece of work by Carbide, how much detail was spelled out by Carbide and how much had to be supplied either by Ferguson or by the Atomic Energy Commission in order to determine the work that was to be done?

A. Very little information was supplied by Carbide. Generally what we call a scope of the work, which would be about, oh, a quarter or half page description of the work that Carbide wanted performed, of the changes that they wanted performed. This would involve several thousand dollars on an average. And Ferguson would have to go out in the field with my representative and with Carbide's representative and see what Carbide was talking about, make measurements in the field. This is Ferguson—make measurements in the field, look at the condition of piping and electrical equipment, and connections, and from this information gathered in the field make an estimate as to [fol. 228] what they, the construction contractor, thought the job would cost.

Ferguson then submitted that estimate to me. It was reviewed by my men and also by the operating contractor. And if we agreed as to the—if I agreed as to the time and price that the construction contractor had proposed, I would authorize him to proceed with the work in the field. If I didn't agree, then I sat down with him and reviewed in detail the estimate and either told him to increase it or de-

crease it or to eliminate a portion of the work, and then authorized him to proceed.

Q. What was the purpose back of these various requests made by Carbide? Why would the changes be requested or additional equipment or changed equipment be suggested?

A. These would all have to be in connection with Carbide's approved operating program under AEC and some connection or other with their operating program.

Q. In connection with their production of materials?

A. Research, development, or production of materials.

Q. I have here a number of papers fastened together. I believe there are 20 pages of this group of papers which I am going to ask you to file as collective Exhibit F-12.

(Exhibit No. F-12 was filed.)

Q. I believe that the first sheet of this is a request of the [fol. 229] type you have just been talking about and which is signed by Union Carbide Nuclear Corporation. Is that correct?

A. That's right, sir.

Q. And this is one of the type that originates from Carbide itself?

A. That's right, sir. This is over \$20,000. So it went up to the AEC Manager through Mr. Armstrong who was Director of Production for AEC at that time.

Q. I notice that on the second page of this exhibit one of the estimates are somewhat broken down, the first estimate being for \$7,325 by UNC. What is meant by that?

A. It is Union Carbide Nuclear Company.

Q. That was the predecessor of Union Carbide Corporation. In other words, were they going—no, that is the division.

Was that the amount of work under this estimate to be performed by Union Carbide?

A. Yes.

Q. And contractor would be whom?

A. This the Carbide left up to AEC to decide.

Q. I notice that on the next document, which begins on page 3 of this exhibit, is the directive that was issued.

Was this the one that was issued pursuant to this request?

A. Yes, sir.

[fol. 230] Q. Without going into all of the detail, that is shown thereon, I note that on page 4 of this exhibit, which is the second page of the directive, this work seems to be divided into two units, one of which under section 1 is to be performed by Union Carbide Nuclear Company and the second is a directive for H. K. Ferguson Company to perform. Is that correct?

A. Yes, sir.

Q. Now on a request of this sort, did the directives when granted or given always require or provide that the work should be performed by H. K. Ferguson, or were they sometimes directed to be performed otherwise, and explain?

A. They were sometimes directed to be performed otherwise.

Q. How?

A. Sometimes the construction work was divided between lump sum contractor participation and Ferguson as a cost plus fixed fee construction contractor. And the reason for this is that in a rather large project program it is possible and practicable to have some of the work performed by a fixed price contractor, and some of the work, the modifications to the process facilities or the connections to the process piping can't be done by a lump sum contractor, and must be done by a cost type contractor, such as Ferguson. So we do have a number of cases where the work is divided between the two types of contractors.

[fol. 231] Q. Can you give us some estimate, or in general at least, the amount of work that was done during this period, either on a yearly basis or otherwise, by lump sum contractors in comparison with that which was done under the Ferguson contract?

A. The best of my recollection about twice as much dollar volume work during this period was done by means of fixed price construction contractors as was done during the same period by H. K. Ferguson.

Our policy was and is, AEC basic stated policy, was and is that we will do all work, all construction work, that is practicable to be done, by means of competitive fixed price construction contracts, and only that work which is not

practicable to do by means of fixed price construction contracts we will instruct the CPFF contractor to perform.

Q. Let's take as an illustration, Mr. Bonnet, this request of December 20, 1955, which is shown in part of Exhibit F-12.

Why do you say that it wasn't practical to do this work by lump sum contractor rather than by Ferguson? Can you recall enough about this project at this time to tell us, or we will get it in another way if you can't?

A. I would like to look over these pages here for a few moments.

[fol. 232] Q. Perhaps by taking page 3 of this exhibit you may be able to give some of the information that I was requesting, the last paragraph on page 3.

A. This work involves alterations and modifications to the first floor of the Alpha 1 building known as Building 9201-1 in Y-12, and obviously required removing certain existing portions of the structure, including electrical and mechanical services, and installing others.

Here is a situation where it would be very difficult and very costly to prepare complete plans and specifications so that this remodeling work could be done on a fixed price basis.

I note also the element of time where the directive is issued on January 12th and calls for completion of the work by June 30th.

And also that a what we call a scope of the work—in other words, a description, not plans and specifications, but a description of the walls to be removed, the electrical services to be provided, the piping to be changed, the heating and ventilating to be provided, the scope or general description was not available from the operating contractor until April 5th.

So that left April, May and June, or 90 days, in which to buy the necessary materials, if they were not in stock, and I am sure all of these items would not be in stock; and [fol. 233] to plan the work in the field on an efficient basis and to complete the job.

There would not have been enough time to meet this July 1st deadline and do the work by a fixed price contractor.

Q. Prior to the issuance of the directive, did The H. K.

Ferguson Company go ahead with any of the work on these particular projects?

A. Are you speaking of this particular job?

Q. Generally speaking, first. Then I am going to come to something on this job.

A. In many instances, because of the urgency of having the work performed, I did authorize Ferguson to proceed with advanced procurement. This is particularly true where what we call long-range delivery items are involved. In other words, if buying special valves or special mechanical equipment, quite often these are not what we call off-the-shelf items, but special items to be furnished by a supplier, and these quite often require six or eight months or even a year sometimes for delivery.

So in those cases we authorize Ferguson to proceed with the procurement of these specialized items even before we authorize them or instruct them to proceed with the work in the field.

Q. That is where you can see that as a result of the long- [fol. 234] range planning you are going to need these items?

A. This is right. In order to meet the and completion date.

Q. I notice in this particular exhibit we have on page 6 the authorization for the procurement of materials is included, and subsequent to the date of the directive, is it not?

A. Yes, sir.

Q. Where the materials for a particular detailed job that is authorized is involved, I take it that the authorization for procurement followed the giving of the directive, did it not?

A. That's right.

Q. As shown here?

A. That's right.

Q. What is the meaning of the second paragraph on page 6 of this exhibit, Mr. Bonnet?

A. Let me read that. These are instructions to Ferguson as to how the costs of this particular project are to be transferred to Carbide.

We identify this project as a general plant project. There are other types of projects such as operating projects

where the funds are to come from operating funds provided by the AEC. There are equipment type of projects where the funds to change the job is to be costed come from what [fol. 235] we call equipment funds.

And this is a general plant project which involves miscellaneous improvements to the operating plants.

Q. In other words, this general plant fund and your equipment fund were different items in the budget, were they not?

A. This is correct.

Q. Did the Atomic Energy Commission through your office direct how each of these projects, for which instructions were given to Ferguson, were to be charged and which account they were to be charged to?

A. Yes, sir. In each case we instructed Ferguson as to where and how the work they performed for us was to be costed.

Q. Does this mean that Carbide was to make payment to Ferguson for this amount that is authorized in this directive?

A. Oh, no. This is simply a paper transaction here.

Q. And the amount of money that Ferguson spent in completing this project was paid in what manner?

A. The Commission provides to Ferguson an advance of funds on an estimated basis. In other words, Ferguson comes to me monthly, or more frequently if they start running out of money, and tells me how much money they think they are going to need for the next month. A voucher is prepared in this amount, submitted to me; and if I agree, [fol. 236] I approve it, send it up to our Finance Division, and then through our Finance Division and advance of funds is provided to Ferguson, and they use this to meet their payroll and to pay vendors for materials which they furnish as a result of purchase orders issued by Ferguson. But it is all from advance of AEC funds.

Q. We have been talking on Exhibit F-12 about construction performed by Ferguson where the request was initiated by Carbide, the operating contractor.

You stated earlier that sometimes these requests were initiated not by Carbide but by the Atomic Energy Commission itself, I believe.

A. That's correct.

Q. I show you a group of papers attached together, consisting of ten sheets, and ask you to file this as collective Exhibit F-13.

(Exhibit No. F-13 was filed.)

Q. The first page of this seems to be a communication from Callaghan to you. Will you explain briefly what this group of papers is?

A. This involves a request from Frank Callaghan, who was head of the Security Division, to me as head of the Construction Division.

Q. That is the Security Division of the Atomic Energy [fol. 237] Commission?

A. This is correct. Asking me to look at the parking lot serving the AEC Patrol just north of Building 9705 to see if it can be fixed up within the \$2500 which the Security Division has available within their budget.

That is the first letter.

So after I got this memorandum from Callaghan, one of my men and a man or two from Ferguson went over and looked at the parking lot and asked Ferguson to make an estimate as to what it would cost to fix up the parking lot as these men discussed in the field. That is, how much work had to be done on the base and how much and what kind of surface treatment should be given to the parking lot.

Ferguson came up with an estimate in line with the verbal comments and inspection made in the field of \$2160.

Then I wrote to Callaghan on the 28th of October, giving him the recommendations he had asked for, and telling him that I thought that the parking lot could be fixed up, placed in a satisfactory condition within the \$2500 which he had available. Then—

Q. Let's go back a moment to page 4 of this exhibit. I note the last paragraph just above the signature there. It is stated therein, "It is desired that this work be accomplished as a portion of a subcontract included under other paving at Y-12."

[fol. 238] Explain, please.

A. This involves a subcontract under H. K. Ferguson. At this time Ferguson had a subcontractor performing black-topping or surfacing work of similar nature in the Y-12 area. And we are saying here that we want to perform this

work on the security parking lot by means of this subcontractor under Ferguson, and therefore asked for prompt action by Callaghan so that we can use this same subcontractor of Ferguson's to do this work on the security parking lot before this subcontractor completes all of his work at Y-12.

And I note it is getting late in the year. It is October 28th when this memorandum is written. And here again time comes in because we generally think of that and all of our paving work has to be completed by the 15th of November. This is a general yearly average. It gets too cold and the weather unpredictable after that date.

Q. I believe as shown in page 6 of this exhibit that you did issue a directive to Ferguson to do this work or have this work done under the subcontract it had?

A. This is correct, sir. And in there again tell Ferguson how the costs are to be handled and what project they are to be charged to.

Q. Note page 7 of this exhibit, will you, please, where you recite that the AEC Patrol requests the following additional [fol. 239] tional work be accomplished.

Is that by the subcontractor or by Ferguson individually, under its contract, if you know?

A. This additional work I mentioned on page 7 involves concrete bumpers to be installed at certain locations on the parking lot. The best of my knowledge this additional work was to be performed by Ferguson's forces, and not by the subcontractor.

Q. Page 10, I believe, is explanatory of it.

A. Yes, sir. The work was being performed under the \$2500 limitation, and here we are pointing out, authorizing Ferguson to install these concrete bumpers, but telling them to be sure and stay within the \$2500 limitation we had set up.

(A recess was had.)

Q. Mr. Bonnet, in connection with the procurement of items of equipment or machinery that were procured, as you stated earlier, from time to time by Ferguson under its contract, did they procure any such items for installation except upon express direction or authority of the Atomic Energy Commission?

A. No, sir, they did not procure any items of machinery or equipment except upon specific authorization or instructions from AEC.

Q. Now in what way did you govern or handle the procurement of inventory items or ordinary stock items which [fol. 240] they used from time to time in their work for their company?

A. Here again we gave Ferguson our general policies and procedures which we wanted and expected them to follow in maintaining stock inventory levels, and which items should be stocked and which items should not.

Q. Were those the procedures usually followed, the ones set out in the manual?

A. Yes, sir, these were the general policies and procedures.

Q. What did you do, if anything—when I say “you,” I mean you, your people, Atomic Energy Commission—to see that they followed these instructions?

A. Here again we made periodic audits of their warehousing and inventory. And then, of course, my men who were continually in the field made almost daily observations as to whether items were being overstocked.

As a matter of fact, the principal warehouse of Ferguson was attached to a part of the same building where we have our offices, so I personally observed the amount of electrical or piping inventory that was being maintained by Ferguson.

Q. Did you from time to time, and your men from time to time, call specific attention to whether the inventory was under or over or so on, in order to keep them at the level required by your regulations?

[fol. 241] A. Yes, sir, we did.

Q. What about this scheduling of jobs? You mentioned earlier something about transferring men from one job to another at your express direction.

Did they ever start on jobs you stopped before completed or transfer their work from one job to another?

A. Ferguson stopped at our instructions on jobs because of shift in emphasis in the operating program.

Perhaps actually we gave out of funds in some cases, and we happened to be running short of funds on one job and want to shift our funds from one part of the program

to another. In cases like this, we would specifically instruct Ferguson to discontinue work on a job, and to proceed on others.

Q. The decision upon which job to proceed or which job to suspend work on, if they were working on two or three more, was made by whom? Ferguson or you people?

A. Made by AEC in all cases.

Q. And did Ferguson follow the decision and instructions given in all cases?

A. Without exception, yes, sir.

Q. You mentioned earlier this morning about directions you gave to increase or decrease the labor force on a given job. I don't believe I asked you about the method of performing a particular job when your inspectors were on it [fol. 242] and saw how it was being performed, details like mixture of concrete or connection of pipe joints. What, if anything, did you people do in that kind of supervision and direction?

A. In many cases my men in the field would observe the construction methods being used by Ferguson. And in those cases where my men had the judgment that greater efficiency could be achieved by a different method, my men would instruct the Ferguson superintendent to change his method of operation, and, of course, in some cases there was disagreement between the construction superintendent and my men in the field. This was not customary. Rare cases. And in those cases where there were differences of opinion, they would come to me for a decision, and I would make the decision as to which way the construction should proceed.

Q. Were these jobs that were done by Ferguson there ones in which you or Atomic Energy Commission was only interested in the ultimate result, or were you interested also and gave direction as to how the performer should do in doing the work?

A. We were interested in both. First, we were interested in the end result, in meeting the completion date. But also we were very vitally interested in the method used in construction because we are interested in performing the work at the least possible cost since we were reimbursing all of the cost to Ferguson. They were using our money. [fol. 243]. This is one of the main jobs of my men in the

field, to be sure the work is performed within the time schedule, but also at the least possible cost.

Q. You have here, I believe, some papers that show generally the things we have just been talking about. I ask you to take this group of papers, only five pages of them, and file this as collective Exhibit F-14.

(Exhibit No. F-14 was filed.)

Q. I think these papers speak for themselves, but I do want to call particular attention to page 5 of this Exhibit F-14.

Is that an example of one of the directives given to discontinue work which they were engaged on and transfer their force to other work?

A. Specifically this instruction is to discontinue work on a particular project. I don't believe it goes so far as to tell Ferguson what to do with the men that they take off of this particular job.

Q. I believe that's correct.

A. It does instruct Ferguson specifically to discontinue all work on this work order No. B5561.

Q. In other words, a work order had previously been given for that particular job of work and here it is countermanded after it was partly done; is that correct?

A. That's correct, sir.

[fol. 244] Q. Did an order such as this call for additional compensation or any change in the compensation as such, or fee as such to Ferguson company?

A. I don't believe I get your question.

Q. Was Ferguson's fee or their charge to Atomic Energy Commission altered or changed when you would direct a stoppage of one job and go to another?

A. Yes, sir. If we had calculated this particular job in Ferguson's fee computation, and then we withdrew this job from Ferguson's contract before they had done a substantial amount of work on it, we would make an adjustment in Ferguson's fee. We would reduce their fee. If we added work, we increased their fee. If we deleted work before Ferguson did the work, it was in their contract and fee was computed, we would reduce their fee.

Q. My attention is called to page 1 of this same exhibit

with reference to the detail with which this work was described. Was that a usual custom?

A. On a job of this type, yes, sir. We here gave Ferguson a detailed description about building a fence, as to so many lineal feet and what size and how many gates we wanted to be used, and what size the posts were to be, how far apart—a description of the fence which we were instructing them to install for us.

Here again in this letter we tell Ferguson where to charge [fol. 245] the cost of this job. This is customary in all of our letters.

Q. That is the same item you referred to earlier in your testimony this morning?

A. Yes, sir.

Q. Does Ferguson in the operating out there under its contract have a budget under which it can plan ahead for the amount of work it is to be called upon to do in a given period?

A. No, sir, Ferguson does not have a budget.

Q. In what way does Ferguson know then or have any idea so that it knows something about the number of men to be employed or the amount of work that it is going to do from time to time?

A. This is very difficult because the work varies so much from day to day, and week to week, and month to month. And this is the very reason we have a contractor of the type we do such as Ferguson, so that they are flexible in their operations to meet our needs.

However, we do—AEC does issue to Ferguson what we call a planning letter. I believe this used to be on a quarterly basis and now is on a semi-annual basis. Where we try as best we can to outline to Ferguson the jobs that will be assigned to them during the next six months.

Of course, we emphasize that this is for planning purposes [fol. 246] only, and is not to be used as any authorization or is Ferguson to go out and hire men or to buy materials on the basis of this overall planning. This is for information purposes only.

Q. Do you have here one of those planning letters?

A. Yes, sir, I believe this is one dated October 6, 1955.

Q. And this paper which we will file as Exhibit F-15, I

note according to the first paragraph thereof states that enclosed are forecast sheets prepared by Carbide.

What are those forecast sheets?

A. These are the various jobs as the operator sees them that will require the services of a construction contractor in a particular plant area, operating plant area.

(Exhibit No. F-15 was filed.)

Q. In other words, while they are not here with this exhibit, there were furnished with these letters from time to time to Ferguson company the forecast sheets or copies of them?

A. Yes, sir, they are furnished to me, and then I review them; and if I agree with them, then I send them on to Ferguson. For example, one of the forecast sheets would be details that go to make up that first item in K-25 of \$299,500.

Q. The total of the work as shown on the forecast sheets, [fol. 247] however, is in accord with your approval, general approval of such forecast?

A. This is correct. If I didn't agree with the forecast, I wouldn't send it on to Ferguson. I would go back to Carbide and iron it out with them.

Q. I notice that in the last sentence on there you give an indication to them—that is, to Ferguson—of when they may expect a new listing or new forecasting prophecy, maybe I ought to call it.

We have in this record been referring to the type of contract under which Ferguson was operating as an integrated or management contract. You understand what we mean usually in the use of the word "integrated" or management contract?

A. I think I do.

Q. Explain what you think we mean by it, so that when we get into this detail we can go into some of it.

A. An integrated contract, Government contract is one where the contractor's functions are integrated into the general systems or procedures followed by other Government contractors. In other words, we want an integrated contractor performing construction work to perform his work, keep his records—keep records for us, perform

warehousing, all the various functions that go to make up the performance of his contract, in a manner which is consistent with similar functions being performed by other [fol. 248] AEC contractors.

Q. Are the types of records that are required to be kept by Ferguson kept in accordance with plans and record keeping prescribed by the Government, or are they the type he keeps on his own as a contractor?

A. The types of records kept by Ferguson are in accordance with the instructions issued by AEC, and to my knowledge are substantially different than the types of records that Ferguson would keep on their private work.

Q. Are their financial records on this contract an integral part of AEC's financial records?

A. Yes, sir.

Q. These books and records, which they keep—are they in reality the books and records of Ferguson, or do they belong to and become the records of Atomic Energy Commission?

A. They belong to and become and are the property of the Atomic Energy Commission.

Q. Was that true, or is that the method followed with reference to lump sum contractors and the records they keep with reference to their work and performance thereof?

A. No, sir. We don't—I don't care as an AEC representative what kind of records the lump sum contractor keeps. I am interested there primarily in seeing that the lump sum contractor performs the work in accordance with the plans and specifications and completes it within the time [fol. 249] prescribed in the contract. But what kind of records he keeps are his own business.

As a matter of fact, on Ferguson's records sometimes they protest at the number and amount of records which we require them to keep. Nonetheless we point out this is a Government requirement, and it is necessary in our overall program, and we instruct them to keep the records in accordance with our instructions to them.

(Whereupon, at 11:50 o'clock a.m., a recess was had until 1:00 o'clock p.m.)

By Mr. R. R. Kramer:

Q. Did the Atomic Energy Commission establish policies and procedures in accounting and auditing which Ferguson is required to follow?

A. Yes, sir.

Q. Explain briefly what these consist of and how they are established.

A. Here again we gave Ferguson the general policies and procedures they were to follow by furnishing them our appropriate AEC manuals, and within these general instructions Ferguson developed policies and procedures under their particular contract and drafted these up, gave them to the AEC for our review and approval. We reviewed them and made corrections where necessary and returned them to Ferguson as their direction and guidelines in detail form.

[fol. 250] Q. Do you have here a collective exhibit setting forth the method by which these accounting procedures were established so far as The H. K. Ferguson is concerned?

A. Yes, sir, this correspondence has to do with the submittal by Ferguson of their accounting procedure for AEC's specific approval.

Q. Will you file this group of papers, which I believe consists of some 14 pages, as Exhibit F-16, please, sir.

(Exhibit No. F-16 was filed.)

Q. Was this accounting procedure, and has it been, continuously followed by The H. K. Ferguson Company in its operations under this contract?

A. The accounting procedure as submitted by, originally submitted by Ferguson was reviewed. As a matter of fact, it was not approved. We instructed Ferguson to make certain changes in it. And after these changes were made and further reviewed, it was then approved.

Since that time there have been changes made upon instructions from the AEC.

What I am saying is that the original approved procedure is not the same one that Ferguson is now following, in all detail.

Q. The procedure that The H. K. Ferguson Company is

following, either now or has at any time since it entered [fol. 251] upon the performance under this contract, is an accounting procedure established by the Atomic Energy Commission, is it not?

A. That's correct, sir.

Q. I do notice that on page 11 of this exhibit there seems to be a revision of this accounting procedure or supplement thereto. Is that correct?

A. Yes, sir.

Q. In addition to these general procedures which are outlined in this Exhibit F-16, are any specific directions or instructions given with reference to accounting and the methods followed from time to time?

A. Oh, yes, sir, this exhibit here is only a very small part of the instructions given to Ferguson regarding accounting procedures.

Q. Do you have here a group of letters and other papers which illustrate the type of specific instructions in addition to the general manual provisions that you have just referred to and which specific instructions were given and followed by Ferguson in connection with its operations under this contract?

A. Yes, sir, these are specific instructions given to Ferguson regarding the handling of financial matters.

Q. This group of papers, which I believe covers 12 sheets, I will ask you to file as collective Exhibit F-17, please sir. [fol. 252] (Exhibit No. F-17 was filed.)

Q. I notice that on pages 3 and 4 of this Exhibit F-17 are certain specific instructions with reference to the method of handling accounts and recording costs; particularly I refer to page 4.

Were those detailed instructions carried out?

A. Yes, sir.

Q. These even carry the details down as to the last day on which certain accounting entries are to be made and information transmitted to you, I believe, do they not?

A. That's correct.

Q. I wish you would turn to the last page of this exhibit. Can you tell us what the purpose of that particular letter was?

A. The purpose of this letter dated October 25, 1955, is to instruct Ferguson as to how they are to set up their chart

of accounts. This is sometimes known as their code of accounts. This is to define for Ferguson how we want their costs kept, under what definitions we want their costs kept and reported to us.

This is very important because we want to be sure, have to be sure that the cost accounts we get from Ferguson tie in with our other integrated contractors so that we are using the same definitions and are accumulating costs in [fol. 253] the same categories for all of our integrated contractors. In other words, so that Ferguson's costs are accumulated and reported and in turn transferred to Carbide on a consistent and uniform definitive basis.

Q. Just what do you mean by costs are transferred to Union Carbide?

A. These costs are transferred for bookkeeping purposes from one contractor of this type to another. In other words, Ferguson completes an item of work. It is picked up on Carbide's—may be picked up on Carbide's books as a capitalization. In other words, it is depreciated by Carbide on a certain predetermined basis.

Q. So that it shows on the books eventually either as a cost of operation of Carbide's contract, or as a capital expenditure by Carbide?

A. Well, I think it would be picked up as a capital expenditure by Ferguson and would be picked up on a capital account by Carbide, but actually Carbide didn't expend the money.

Q. But it is established as a part of Carbide's capital account?

A. That's right, sir. If it belonged in that account by our definitions which we have given Ferguson.

Of course, some of these items that we pick up, as explained earlier, that work performed by Ferguson we tell [fol. 254] them to charge this to an operating account, you see.

Q. You testified earlier this morning that you established the rate of depreciation to be used by these contractors operating under the management type contract.

I ask you to turn to page 7 of this exhibit and ask you if that is a type or illustrative of the depreciation methods as established by the Atomic Energy Commission for H. K. Ferguson Company?

A. Yes, sir, this is an example of where we tell Ferguson what depreciation rates to use for various types of construction equipment.

Q. And is it set up accordingly on the books of Ferguson?

A. Yes, sir.

Q. You have been testifying with reference to the type of control and direction exercised by Atomic Energy Commission over the financial operations, bookkeeping and accounting, of H. K. Ferguson.

Do you exercise control over personnel and personnel policies followed by Ferguson under its contract?

A. Yes, sir.

Q. Do you have here prepared in the form of exhibit letters which are illustrative of this control in the field of personnel?

A. Yes, sir.

[fol. 255] Q. This group of papers is attached together, and I believe consists of some 35 sheets. And I will ask you to file them as Exhibit F-18.

(Exhibit No. F-18 was filed.)

A. Yes, sir. These are illustrations of instructions and information given to Ferguson in the area of personnel management.

Q. I notice that the first sheet of this seems to deal with a change suggested by Ferguson and a response by you to that suggestion, dealing with the general superintendent of the work at Oak Ridge.

A. That is correct.

Q. Before making that change in general superintendent, according to this letter, they obtained—I mean Ferguson company obtained the consent and approval of your office. Is that correct?

A. That is correct. Including the approval of a salary rate for the general superintendent.

Q. The second page of this exhibit seems to deal with the payroll and timekeeping procedure. Is that the method usually followed in connection with handling payroll and timekeeping procedure? In other words, did they obtain your approval?

A. Yes, sir. Here again we gave Ferguson our overall policies and procedures in the form of our manual and

[fol. 256] Within this framework they presented to us a detailed payroll and timekeeping procedure which we reviewed and corrected and approved, or approved as presented if we agreed with them.

Q. What about the page 3 of this particular exhibit?

A. This is an authorization by me to Ferguson to employ a Mr. Norman Carmichael as an estimator at a salary rate of \$135 per week.

Q. You mean before they could employ an estimator at a salary like this it is necessary for them to obtain the approval of the Atomic Energy Commission?

A. This is the arrangement that we have with the Ferguson company, yes, sir, that they obtain my approval. Not only for an estimator, but specifically they do not hire any non-manual employees without my concurrence or approval.

Q. What does page 4 of this exhibit show?

A. Page 4 is a letter from me to Ferguson pertaining to the number of non-manual employees to be maintained on the Ferguson payroll. This is non-manual employees only.

Here there is some disagreement between the number Ferguson thinks they should have and the number which I approve. And I am telling them here that we will approve a ceiling of 23 non-manual people for Ferguson in Oak Ridge.

Q. Suppose they, in place of following this suggestion or this communication, employed 25 or 26 non-manual employees, what would be the result and what was the result [fol. 257] in such instances?

A. Well, this never happened, but the result would be that it would be disallowed on their voucher, and they would not be reimbursed for these services, for this expense.

Q. Let's turn to page 15. Before we get to page 15, I want to stop at page 6; then I will go to page 15.

I notice that you are discussing in that communication the qualifications of a man to be employed by a particular job.

What did you do, or what do you do under Ferguson's operations with reference to approving qualifications of men employed in the non-manual group?

A. The procedure that I follow particularly in a case like this, which is a personnel manager—I don't follow this on all clerks and stenographers and messengers and draftsmen, and so on, but a man such as this, that has a responsible job as personnel manager, Ferguson first presents to me the personnel folder on the employee they propose to hire. And I review this. And if I agree that the individual is a qualified candidate for the job, then we ask Ferguson to arrange for the individual to come in and to have a personal interview, both with the Ferguson organization and with me.

And, if, after the personal interview, we agree that the individual is qualified to fill the proposed position, then I [fol. 258] authorize Ferguson by means of a Form 37, I believe it is called, to put the man on the payroll at a certain salary.

This particular case here I remember very well. It is where Ferguson had a personnel manager from their home office by the name of Mr. Cherry, and they were proposing to send him back to Cleveland and to replace him with one of the other individuals. And I am here in this letter telling him that neither of these individuals is satisfactory as a replacement for Mr. Cherry, for them to go out and get somebody else or to make other arrangements.

Q. Passing on to another page, what about extended time weeks or overtime with reference to employees on this? And turn to page 14 of this exhibit, please, and tell us with reference to this page of the exhibit to what extent you or the Atomic Energy Commission controls their overtime or extended work weeks. Perhaps you ought to turn back to page 13 and use it in connection with page 14.

A. I am familiar with this situation now. We have a rule which the contractor must follow in overtime. That is, that the standard work week is approved as a 40 hours per week. This is five eight-hour days.

The contractor is permitted to work his employees without specific AEC approval in individual case eight hours in addition to the 40 hours per week, with the further proviso [fol. 259] though that the contractor cannot work any individual for more than three consecutive weeks for 48 hours without obtaining AEC approval. Because this

has the effect of extending the work week from 40 hours to 48 hours or more.

So any time that an individual is to work more than 40 hours for more than four weeks, then the AEC approval must be obtained. Or, if the contractor proposes to work an individual for more than eight hours overtime in any one week, then AEC approval must be obtained.

In this case here we are dealing with timekeepers, where I am authorizing Ferguson to extend the work week for certain timekeepers to 45, 47, and 47½ hours.

What we do in this particular case is we analyze as to whether it is cheaper to extend the work week for these timekeepers by five or seven and a half a week, or whether it is cheaper to hire additional timekeepers and keep them all on a 40 hour week.

Q. You review these for these purposes?

A. That's correct.

Q. And give authorization?

A. That's right.

Q. I believe you have, or have established, or do establish project rules and regulations that govern maybe carrying firearms, use of Kodaks and cameras, and other things of that sort by employees at H. K. Ferguson, do you not?

[fol. 260] A. That is correct.

Q. I ask you to refer to page 15 and page immediately following which seem to deal with this subject. Again I am referring to this particular exhibit.

A. This deals with the general subject you mentioned, but goes much further in that it describes under project rules such things as gambling on the project, loafing or sleeping on the job, fighting on the job, and what disciplinary action will be taken in cases such as this. These particular rules and regulations.

I remember this case, and as stated in this letter of November 14, 1955, that the rules and regulations submitted by Ferguson were considered inadequate, and here we, the AEC, sat down and wrote out these rules and regulations and sent them to Ferguson and said "the ones you, Ferguson, furnished us are not considered satisfactory, and here are the ones you are to use."

Q. Did Ferguson follow your direction and use those?

A. Yes, sir.

Q. We were talking a moment ago about salaries for non-manual employees.

There is in this exhibit, I believe, on page 27 a further illustration with reference to the handling of these non-manual employees.

Will you turn to that page and comment on it, please?

[fol. 261] A. This is a letter in which I am returning to Ferguson without approval proposed salary increases for five superintendents on the payroll, in which I am telling Ferguson I don't agree with them and not approving the salary increases which Ferguson has proposed.

Q. When you did not approve the salary increases as proposed by Ferguson, did Ferguson follow your suggestion or its own?

A. It followed mine.

Q. What are the pages illustrative of which follow immediately after page 27 and seem to be form sheets, and there are some four or five of them together there?

A. These are the Form 37 I referred to earlier, which is the form that all of our integrated contractors use in submitting for salary increases or basic salaries to the AEC for approval.

This is a standard form, AEC form, listed and shown in the upper left-hand corner, I believe. Yes.

Q. And the use of this form was standard procedure?

A. That is correct, sir.

Q. Comment on the page 33 of this exhibit, please, sir.

A. This is the letter dated October 8, 1957, in which I am telling Ferguson to temporarily deviate from the approved procedure for checking time twice weekly in the field, and to check time only once a week in the field.

[fol. 262] This is in response to a request from Ferguson to add an additional time checker. And what I am telling him here is instead of adding an additional employee, to check time less frequently.

Q. The last two pages of this exhibit, which I believe we have inserted in reverse order, seems to be a request from Ferguson company for the employment of one individual for certain specific purposes, and page 34 seems to be a limited approval for such employment. Is that correct?

A. That is correct.

Q. Was this a procedure followed in cases of this sort from time to time and this merely illustrative of it?

A. Yes, sir.

Q. Did you or the Atomic Energy Commission through you maintain direction, supervision, over procurement and over policies with reference to procurement of property and with reference to property management?

A. Yes, sir.

Q. Were these policies and procedures in general established by the manual, copies or pages from which have already been filed here as exhibits?

A. Yes, sir.

Q. I have now handed you a group of papers or sheets of [fol. 263] paper, some 74 in number, I believe, and which I am going to ask you to file as Exhibit F-19, and I believe these deal with procurement procedures and policies in the main, do they not?

A. Yes, sir.

(Exhibit No. F-19 was filed.)

Q. I believe page 1 of this exhibit shows approval of the matters set forth in the pages 2 through 33 of this exhibit. Is that correct?

A. That is correct, sir.

Q. I notice that page 8 is marked so as to indicate that it has been eliminated or stricken. What does that mean?

A. This means that the AEC did not agree with the procedure as prepared and presented by Ferguson, and accordingly it was revised, and revised page 4 was substituted as shown on page 7 of the exhibit.

Q. These sheets that I have just referred to do set forth in detail the procurement procedures, do they not?

A. That is correct, sir.

Q. What about page 34 of this exhibit and the pages that immediately succeed it, being pages 34 to 36?

A. Page 34 of the exhibit is a letter dated September 20, 1955, from me to Ferguson telling Ferguson the policy we want followed in evaluating fixed price subcontracts.

[fol. 264] Q. The pages 35 and 36 which are attached to this letter seem to be signed by Mr. Sapirie rather than by you.

A. That is correct. This was the policy given to me by the manager of Oak Ridge Operations, and I in turn passed instructions on to Ferguson.

Q. Were these instructions followed by Ferguson?

A. Yes, sir.

Q. On the subject matter covered?

A. Yes, sir.

Q. Now turn to page 37 of this exhibit. Would you comment on it, please?

A. This is a letter dated August 3, 1956, from me to Ferguson in which I am telling Ferguson that their subcontract No. 106 is not approved, and that there are certain changes that must be made before the AEC will approve it.

Q. The subcontract referred to, I believe, is attached to this exhibit and begins at page 40, and runs through the succeeding pages.

A. That is the subcontract with Panellit Service Corporation as ultimately approved by the AEC. That is after these changes were made.

Q. I call your attention to Article 36 of this subcontract which appears on page 61 of this exhibit. And I read the first clause of the first sentence of that article:

"It is understood and agreed that this Subcontract is entered into by the Contractor for and on behalf of the Government,"—and I am going to read more than that, quoting again—"that the Contractor is authorized to and will make payment hereunder from Government funds advanced and agreed to be advanced to it by the Commission and not from its own assets, and administer this Subcontract in other respects for the Commission, unless otherwise specifically provided for herein; that administration of this Subcontract may be transferred from the Contractor to the Commission or its designee, and in case of such transfer and notice thereof to the Subcontractor, the Contractor shall have no further responsibilities hereunder; and that nothing herein shall preclude liability of the Government for any payment properly due hereunder if for any reason such payment is not made by the Contractor from such Government funds."

Was that a standard provision inserted in the various subcontracts which were awarded by Ferguson company?

under its prime contract with the Atomic Energy Commission?

A. Yes, sir.

Q. I notice on page 70 of this contract—I refer now to the subcontract which is a part of this exhibit—there appears the certification to the execution of the contract, and it shows that this subcontract is approved by the United States of America by the U. S. Atomic Energy Commission and by William A. Bonnet. That is you, of course. [fol. 266] A. Yes, sir.

Q. Was that standard for the use of subcontracts which were awarded by Ferguson under its contract?

A. Yes, sir.

Q. You did testify this morning that in order to expedite progress of work, authorization was given to The H. K. Ferguson Company to purchase or procure materials, but that before any such procurements were to be made there had to be an authorization given to Ferguson.

Do you have here some letters showing the method under which this type of authorization was granted?

A. Yes, sir.

Q. I will ask you if you will file this group of papers which consists of nine sheets as collective Exhibit F-20.

(Exhibit No. F-20 was filed.)

Q. Now I turn to page 4 thereof and ask you if you will explain it please.

A. Page 4 relates to a letter from me to Ferguson. Actually this letter is from H. E. Belton, Acting Director, to Ferguson dated April 3, 1956.

Q. Who was he?

A. Belton is my deputy and acts in my capacity when I am absent or not otherwise available.

Q. Go ahead.

[fol. 267] A. This is a letter to Ferguson in which we are telling them to discontinue their purchasing work on work order B-7111. We have given Ferguson an authorization to proceed with procurement on February 2, 1956, and this letter of April 3rd tells them to not make any more purchases.

Q. In other words, you were rescinding as of this date part of the order previously given?

A. Yes. Here is an example where there is a change in the program, in the operating plant, and we are telling Ferguson to discontinue work on this project, to hold everything in abeyance until we advise him further as to whether the project is to proceed or to be cancelled in its entirety.

Q. Let's turn to page 9 of this particular exhibit. Will you discuss it, please.

A. This is a letter dated March 21, 1956, signed by Belton for me, instructing Ferguson to reject two bids on a steel frame building, and further instructing Ferguson because of the early requirements for the use of this building to deviate from their standard procedure, standard approved procedure and to negotiate with one of the companies who is the low bidder for furnishing the building in question.

Q. Is this illustrative of the type of instructions that were given from time to time by your office to The H. K. Ferguson Company?

A. Yes, sir.

[fol. 268] Q. There is testimony in this record with reference to the use of Government owned and available excess property by Ferguson before it would be authorized to make purchases of such properties, either equipment or construction materials or any other type of property which was necessary to use in fulfillment of its contract.

Do you have here in your hands now a group of letters illustrating this procedure?

A. Yes, sir.

Q. I will ask you to file this as Exhibit F-21.

(Exhibit No. F-21 was filed.)

Q. Were lists such as *our* referred to in this communication—I especially refer to pages 1 and 2 of this exhibit—furnished to Ferguson from time to time by your office?

A. Yes, sir.

Q. And this is typical of the ones that were furnished?

A. Yes, sir.

Q. What, if any, check was made by Ferguson or by your office to determine whether or not equipment or material on hand was suitable for use by Ferguson in the fulfillment of its contract? And explain somewhat, please.

A. You mean the equipment on hand, in Ferguson's hand or the AEC?

[fol. 269] Q. No, in AEC's hands or another governmental agency?

A. First we tried to determine by review whether or not equipment was available from within AEC, first whether it was available in Oak Ridge and then whether it was available in some other portion of the AEC operation. And then if it was available from some other Government agency.

This review was made by AEC and as indicated in this letter of May 2, 1956, the lists were passed on to Ferguson for their further review, and with the instructions that Ferguson submit to me their requests for any particular item of equipment, which I then would review in detail and approve or disapprove.

Q. What was done with reference to equipment that Ferguson had on hand if they requested authority to purchase or the furnishing to them of some equipment of the same type as a replacement for what they had on hand?

A. My representative would go out in the field and personally inspect the equipment and make a determination as to whether or not it was advisable from the Government's point of view to repair the equipment and put it back in service or whether it had served its useful life and it was to the Government's advantage to dispose of the piece of equipment which Ferguson had on hand and to get another piece in replacement either by transfer from within AEC or some other Government agency or to go out and [fol. 270] buy a new piece of equipment.

Q. Who made that determination of whether this was to be replaced by either new equipment or equipment obtained from some other source, or whether to continue to use, though it might be necessary to repair, the piece of equipment then on hand by Ferguson?

A. AEC made this determination.

Q. And Ferguson acted then on the determination as made by you or by your office?

A. That is correct. I say the AEC in this instance because when we get into specialized equipment, quite often we bring in our staff representatives from the manager's office to advise me as to what it would cost to repair a specialized piece of heavy construction equipment.

Q. Did Ferguson obtain or purchase or acquire for use in connection with its operations there any equipment except

that which had first been authorized by the Atomic Energy Commission, or did you at all times follow the procedure you have just suggested as to replacing equipment on the job?

A. To the best of my knowledge, we always have followed the procedure I just outlined.

(A recess was had.)

Q. Mr. Bonnet, how close did your office, your men in your employ, work with H. K. Ferguson and its employees in connection with these procurements?

[fol. 271] A. The procurement of equipment?

Q. Yes, sir. Well, make it all procurements.

A. I don't believe I fully understand the question. Would you rephrase it?

Q. Did your people check with reference to the necessity of the various items that Ferguson asked for authority to procure, and to what extent did you check on the necessity of them having such material and equipment?

A. I want to treat this in two phases. One has to do with materials, and one has to do with equipment.

Q. All right, break it down.

A. On equipment we, of course, gave Ferguson our overall policies and procedures as our standard practice, having to do with the utilization of equipment, which is construction equipment.

As a part of this overall program Ferguson submitted to me their recommendation as to how much equipment they should carry on their rolls at any one time. This is the number of D-8 tractors, D-6 tractors, power shovels, air compressors, trucks—items of this type.

This was reviewed by my office, this list, and agreement was reached; and we approved—after revisions were made, approved the schedule or the inventory of construction equipment which Ferguson was to maintain.

[fol. 272] Now this is a continuing review on the part of my office as to just how much construction equipment does Ferguson need at any one time. This may increase or decrease as the work load changes. So this is a continuing review that we have with Ferguson at all times.

However, there is a schedule made up of just how many pieces of equipment of all the various types they are to

have in their custody at any one time. But this is a daily and weekly and monthly continuing review by my engineers in the field.

Q. Now having determined that it was proper for Ferguson to obtain some additional equipment, using tractors as an example, or other types of equipment, did Atomic Energy representatives, representatives of your office or you personally participate in evaluating bids and discussing the equipment with the vendors and so on?

A. Yes, sir.

Q. Just explain.

A. Our chief source of procurement has always been furnishing equipment to Ferguson from other Government sources. You may recall earlier I said that the Commission as recently as 1955 was concluding quite an extensive construction program; as a result of the discontinuance or the completion of this large construction program, the AEC had quite a lot of construction equipment which belonged to the Government. And this was our chief source of [fol. 273] supply in setting up equipment under the Ferguson contract for that construction contractor to use.

Very little new construction equipment has been purchased by Ferguson. In those cases where it was purchased by Ferguson, review was made by AEC, and specifically approval was given Ferguson to go out and solicit bids for particular types of trucks, I think of as an example, and those bids were received. They were reviewed by Ferguson and analyzed by AEC. And we authorized the contractor to go ahead with the procurement of certain trucks.

Q. Before you authorized the contractor to go ahead with it, you reviewed the bids, or your office did itself, and gave its approval thereto?

A. Yes, sir. We reviewed also the size and type of trucks on which bids were to be solicited in the first place.

Q. You were talking a moment ago about construction equipment. Now take equipment that was to be installed in the buildings and so on, equipment to be used by the operating contractor. Ferguson did purchase some of that from time to time under your authorization?

A. That is correct.

Q. What procedure was followed with reference to that?

[fol. 274] A. The Commission gave to Ferguson the detailed specifications pertaining to the required equipment. Ferguson then, following our authorization to proceed with procurement, solicited proposals of bids from various suppliers, received the bids, reviewed them, gave the complete file to me. My office reviewed it, and if we agreed with Ferguson's recommendation, then we authorized Ferguson to proceed with the purchase of this specialized equipment.

Q. What about representatives of your office participating in the discussion by Ferguson with the vendors for the purchase of that type of equipment?

A. Well, quite often and particularly on the more complicated pieces of equipment we have what we call pre-bid conferences. This is where Ferguson sends out the specifications to a number of suppliers and then sets up a conference where the suppliers may come in and ask for a clarification on any of the technicalities of the equipment. Quite often they ask questions as to the terms and conditions of the subcontractor purchase order form that they are to use.

My office participates in these pre-bid conferences, and it is quite customary for the questions presented by the vendors to be directed to the AEC rather than to Ferguson, because some of these questions Ferguson just can't answer because they are only acting on our behalf.

We gave Ferguson the information as to the particular [fol. 275] characteristics of a piece of equipment, and they have passed this on to the potential bidders. The potential bidder asks a question. AEC answers it.

Q. According to this record these purchases are made on what we call purchase orders which have been defined and explained by previous witnesses.

What does your office have to do with these purchase orders that are issued for this type of equipment we are just now talking about?

A. In accordance with the procurement procedure which we discussed earlier and which was discussed earlier and which AEC has approved, there are certain types of purchase order actions by Ferguson which AEC must approve.

AEC must approve any purchase order in excess of

\$10,000 issued by the contractor. AEC must approve any purchase order where Ferguson proposes to issue to other than the low responsive bidder. AEC must approve any purchase order which is of an unusual nature. This is for some unusual services or some unusual piece of equipment.

AEC must approve any purchase order on which competitive proposals cannot be received, if any. For example, if only one proposal, one bid is received, then this is not in our language a response to competitive bidding, and AEC must approve this regardless of the amount of the purchase order.

[fol. 276] All these rules and other details are spelled out in the procurement procedure.

Q. And have they been followed consistently in this operation?

A. Yes, sir.

Q. Suppose that the purchase order is less than \$10,000. As I understood your testimony, that didn't require previous approval necessarily by the AEC office. But do you know anything about the purchase orders that are issued therefor?

A. Under \$10,000?

Q. Yes.

A. Yes, sir. We have a practice and procedure set forth with Ferguson where my office gets copies of all purchase orders issued by Ferguson regardless of the amount. And we review those.

If there is any that we think is questionable or out of order, not consistent with the procedure which we have approved, we dig into it and find out the story behind it, what has been done, and in some cases it is necessary to instruct the contractor to revise what he is doing and to proceed on a different basis.

Q. What sort of appraisal, if any, and how frequently does the—

A. Excuse me, sir. May I elaborate on that?

[fol. 277] Q. Yes.

A. I think it would be proper to say that I manually approve all purchase orders over the \$10,000, but we review all purchase orders entered into by Ferguson. But we man-

ually approve those over \$10,000 or those which are exception to the standard procedure.

Q. And so indicate on them that manual approval?

A. That is right.

Q. Those less than \$10,000 you do not indicate thereon necessarily your approval, but you do review them?

A. Yes, by our silence we agree with Ferguson, what Ferguson has done.

Q. Do you conduct an appraisal of the procurement activities and review their transactions from time to time?

A. Yes, sir. Here again we review and audit on a periodic basis Ferguson's procurement activities to be sure that they are complying with our instruction as set forth in the approved procedure; and again from day to day in our contact with Ferguson we review their specific activities during that day.

One of the many yardsticks we use, and this is on a monthly basis, for example, I insist that Ferguson keep a continuing record as to how many purchase order actions they have issued weekly and monthly, and then require them to divide that by the number of personnel they have in the purchasing department, and that way we can keep [fol. 278] —I can keep a running record as to how many purchase order actions per individual are processed weekly by Ferguson, and can see whether this is going up or going down.

A dollar volume basis is not a very good basis. But the number of pieces of paper that are being processed per individual in the purchasing department.

Also a pretty good indication, pretty good yardstick we use, I have Ferguson keep a running record of the cost in terms of salaries in the purchasing department for each purchase order action.

This is currently running around \$13 or \$14 per purchase order action. We try to get that down to about twelve and a half dollars.

Q. Can you tell us either percentagewise or dollarwise how many or how much of the purchases made or purchase orders issued are manually approved, and how much are not manually approved?

A. I would estimate on a dollar volume basis that over

90 per cent of the purchases made by Ferguson are manually approved by the AEC.

Q. Would that be true taking just as a general proposition from the time the Ferguson contract went into effect?

A. Yes, sir.

[fol. 279] Q. From this review you have been telling us you conducted of these purchasing and procurement procedures, have you from time to time found things that you thought should be revised and changes made?

A. Yes, sir.

Q. Have you submitted to The H. K. Ferguson Company letters calling attention to such conditions?

A. Yes, sir.

Q. And pointing out the suggested changes?

A. Yes, sir.

Q. You have now in front of you a paper which I believe, or a group of papers which we will ask you to file as Exhibit F-22, and which consists of eight pages, which I believe covers something of this scope, does it not?

A. Yes, sir.

(Exhibit No. F-22 was filed.)

Q. Are these the only instances where communications of this sort were sent by you or your office to Ferguson, or are these merely typical of the various communications?

A. These are simply typical. Of course, we have many verbal instructions from me to the contractor also.

Q. I want to call attention to the closing sentence of page 4 of this exhibit in which, after pointing out certain matters which you have criticized therein, you ask that H. K. Ferguson Company advise if changes and methods were initiated as suggested.

Did H. K. Ferguson follow your suggestions as these were made from time to time?

A. Yes, sir, they interpreted these as instructions and made the changes accordingly.

Q. I believe my question with reference to this Exhibit F-22 may have been more limited than the scope of this exhibit is.

And I call your attention to pages 5, 6, 7, and 8 of this exhibit which is really not a communication type that I referred to in my original question.

Will you explain what these pages of this exhibit show?

A. This is an appraisal report or a review made by the supply division which is one of the staff divisions of the AEC Oak Ridge Manager's Office.

And in this case the supply division is acting as staff to me in reporting to me the results of their review of Ferguson's property management program.

In this they cite the things they have found in their review, and I believe they make certain recommendations as to changes that should be made. And I would pick this up if I agreed with these changes and instruct Ferguson by letter to make the necessary changes.

[fol. 281] Q. The report does show the extent to which Atomic Energy Commission went in supervising the procurement and property management operations of The H. K. Ferguson Company, does it not?

A. That is right, sir.

Q. The names signed on page 8 of this exhibit, the fourth page of the particular paper we are now talking about, are names of employees of AEC or of Ferguson?

A. These are AEC employees.

Q. I hand you two papers attached together which I propose to file as Exhibit F-23, and which are communications from you and your office to The H. K. Ferguson with reference to the handling of and report of surplus real property and disposal thereof, I believe.

(Exhibit No. F-23 was filed.)

Q. Would you comment on these papers?

A. The first paper is letter dated October 10, 1956, from me to Ferguson telling them that there is a revision coming out to a certain chapter of our manual, that prior to receipt of this revised instruction in the form of a revision to the manual they are to immediately put into effect a change in the procedure which I advise them will come out in the form of the revised manual at a later date.

Q. These manual chapters referred to in here cover utilization and disposal of property in general, do they not? [fol. 282] And these are simply typical examples of the instructions given in pursuance of the manual provisions?

A. That is correct.

Q. In addition to what we have been talking about con-

cerning the establishment of procurement and procedures which were to be followed and were followed by H. K. Ferguson under its contract, were policies and procedures also established with reference to many other items?

A. Yes, sir.

Q. Can you name some of the items in addition to the ones we have referred to already?

A. Some of these items have to do with the inventory control, warehousing and storage of property, maintenance of equipment, the care and use of Government motor vehicles, safety and security.

I am sure there are many others that I don't recall from memory, but which are included in the manual chapters.

Q. What about the loaning or borrowing of property from AEC offices or other contractors which is to be used by Ferguson?

A. That subject is covered in our instructions to Ferguson.

Q. What about the control of sensitive property?

A. That's covered in our instructions to Ferguson.

[fol. 283] Q. I believe you have already made some reference to the retention and control of the records that are to be maintained by the Ferguson company.

A. Yes, sir. That is included in our instructions.

Q. What about warehousing and storage?

A. I believe I mentioned that as being included.

Q. You did mention it?

A. Yes, sir.

Q. Among these items that you have just referred to of the AEC establishing policies and procedures, you mentioned the operation and use of motor vehicles.

I am going to show you here a group of papers which I believe refer not only to this item that you have just testified about but to other items that are within the scope of the questions we have just been asking, and ask that you file this as Exhibit F-24.

(Exhibit No. F-24 was filed.)

Q. I call your attention to page 1 of this exhibit, and it is a collective exhibit consisting of five sheets. I notice that it seems to be a directive with reference to the operation of motor vehicles, which were federally owned.

Was this matter referred to in this communication given immediate attention so far as you know?

A. Yes, sir. Here I am telling Ferguson that none of their employees are to drive any Government vehicles un- [fol. 284] less they have a proper Government operator's permit.

Q. Incidentally, did Ferguson have any of its own motor vehicles out there or were they all federally owned vehicles?

A. They were all Government owned.

Q. What about the construction by Ferguson of small buildings such as field offices or change houses and so on? To what extent did Atomic Energy Commission control construction and expenditure of either time or money therein?

A. Here I established a rule for Ferguson to follow, which they did follow, that they would not construct any temporary construction facilities such as field offices or shacks or warehouses which involved more than 16 man-hours of labor without my prior approval.

Q. There are other pages in here that illustrate what you just now are talking about, but I want to call attention particularly to the last page of this collective exhibit which seems to deal with inventory.

Will you comment thereon, please?

A. This last page concerns a letter dated January 13, 1958, in which I am telling Ferguson that their inventory figures for the year 1957 are too high, and that they are to reduce their inventory to a given figure here of \$350,000 by March 1st of that year.

Q. What does inventory consist of as referred to here? [fol. 285] Is it equipment like trucks, office equipment?

A. No, sir.

Q. Or is this building materials?

A. This has to do with building materials and supplies, such as lumber, electrical conduit, electrical wiring, standard size pipe, and standard size valves, paint, and so on.

Q. Did the Atomic Energy Commission establish policies and procedures with reference to transportation activities that were carried on by Ferguson company under its contract with the Commission?

A. Yes, sir.

Q. Do you have here an exhibit illustrative of this control standard and procedure? I don't believe the papers I have handed you show what I have asked you, but such procedures are set forth in the manual, pages of which have heretofore been filed in this case.

But what do the papers which I have just handed you and which we are going to file as Exhibit F-25 show?

(Exhibit No. F-25 was filed.)

A. These papers in Exhibit F-25 deal principally with bill of lading pertaining to the shipment of materials by Ferguson.

The first paper shows an L&N bill of lading where, Ferguson [fol. 286] is shipping some materials from Oak Ridge to Weldon, Missouri, and in accordance with their instruction Ferguson shows on the face of the bill of lading that the shipment is the property of the Government and the freight charges are to be assumed by the Government.

Q. Did the Atomic Energy Commission authorize the insertion of this statement on these bills of lading?

A. Yes, sir.

Q. Was this procedure followed and this is merely typical of the various ones used?

A. To the best of my knowledge it was followed, yes, sir.

Q. Attached to this bill of lading is a letter which apparently is not related to the bill of lading itself. And I refer to page 2 of this exhibit.

Will you explain what that letter is?

A. This letter dated November 21, 1955, is an authorization to Ferguson to issue Government bills of lading, a delegation of authority to an individual in the Ferguson company to act as our agent for and on behalf of the AEC in this case.

Q. It also calls attention to certain provisions of the transportation manual which did govern to some extent the procedures followed or to be followed by Ferguson, does it not?

[fol. 287] A. Yes, sir, this is a delegation of authority and then tells Ferguson that the person exercising this delegation of authority should carefully follow the instructions included in the manual chapter.

Q. What is the third page of this particular exhibit?

A. This is a waybill from the Dixie-Ohio Express Com-

company, which is a trucking transportation company, showing that certain electrical equipment here is shipped to the United States Atomic Energy Commission in care of H. K. Ferguson Company, Oak Ridge, Tennessee.

This is the manner in which all suppliers are instructed to make shipments under the Ferguson contract and the procedure followed.

Q. I believe that under one of the exhibits already filed this was the instruction contained on the purchase orders which were transmitted to the vendors; is that correct?

A. That's correct, sir.

Q. And is this typical of the waybills that were received on such shipments?

A. Yes, sir.

Q. With reference to personnel, you testified earlier something about the security regulations, and you referred to the use of firearms, cameras, etc., that was permitted by the employees of H. K. Ferguson Company.

[fol. 288] To what extent and under what conditions were procedures established, policies maintained, by the Atomic Energy Commission for The H. K. Ferguson Company and its employees which dealt with security?

A. In the area of security, as in other areas, we issue to—the AEC issued to Ferguson specific instructions as to the rules and regulations and procedures that they must follow, and they did follow them.

Q. Were these specific policies and procedures, or just general in nature?

A. These were specific.

Mr. Rice: Excuse me, Mr. Kramer, I think you intended, didn't you—didn't you use "permitted" rather than "prohibited"?

Mr. Kramer: I meant "prohibited."

Mr. Rice: I figured you did, because I had read it on those regulations.

Mr. Kramer: I meant "prohibited." I appreciate that. When I said "permitted" the use of firearms, cameras, etc., I should have used the word "prohibited." Thank you.

By Mr. Kramer:

Q. Was specific instruction given to Ferguson with reference to the personnel who could carry firearms?

A. Yes, sir, we authorized certain individuals in Ferguson's guard force to carry firearms.

[fol. 289] Q. Were these instructions or authorizations given by written communications addressed to Ferguson company and coming from your office?

A. Yes, sir, in all cases.

Q. And you have present one of the type of such grants of authority as were given by your office to Ferguson company?

A. Yes, sir.

Q. This one, I believe, is dated October 17, 1956, and deals with three different individuals, is it?

A. Yes, sir.

Q. Is this the only one that was issued to Ferguson for such authority, or is this merely typical of the type of authorizations that were granted?

A. There were other authorizations similar to this, and this is only typical.

Q. Will you please file that letter as Exhibit F-26.

(Exhibit No. F-26 was filed.)

Q. What, if anything, did the Atomic Energy Commission do, or what procedure did it establish with reference to employees of Ferguson who from time to time would be in the sensitive area?

A. Would you rephrase your question? I don't understand it.

Q. Were there any rules and regulations established by [fol. 290] the Atomic Energy Commission, procedures and so on, for the employees of Ferguson to follow when they would be in the sensitive areas or the radiation areas?

A. Yes, sir.

Q. I am talking about health and safety regulations now.

A. I wasn't quite sure what you meant by sensitive areas. Sometimes we use this as a security area. You are asking the question in terms of health. Your question has to do with health and safety?

Q. That's right. Health and safety.

A. I believe, as I mentioned earlier, that on specific jobs, in specific areas, where the health and safety of the individual may be affected, we give Ferguson specific instructions, and pertaining to protective clothing that must be worn, the number of minutes or hours that they

can work in a particular area, whether or not smoking is permitted, whether or not eating is permitted in that area. Also, instructions as to whether clothing must be changed before entering the area, showers taken before entering and leaving the area. Specific instruction dealing with each individual circumstance is issued.

Then we arrange for Carbide to monitor these working conditions because they may change from day to day, or hour to hour. And they are continually monitored, as we [fol. 291] call it, by the health physics group of the operating contractor, to be sure that the instructions are being followed, and that if revised instructions must be issued that proper revisions, either tightening up or relaxing of the previous instructions issued to Ferguson company, are made.

Q. You spoke earlier about the control of the number of employees, especially the non-manual group, you exercised over Ferguson.

What about safety engineers and so on? Is there any authorization for that by Ferguson?

A. Your question is did I give Ferguson any authorization for a safety engineer?

Q. Yes.

A. Yes, sir, they have—well, I can't recall the number that they had during 1956 and 1957, but as an example, they have one man now that doubles as a safety and security officer, for Ferguson for a total employment of some 800 people.

Now I have available to me a safety engineer from the Manager's staff, who daily visits our construction jobs to be sure that the safety rules and regulations prescribed by the AEC are being followed.

Q. What have you done with reference to procedures for handling medical investigations or injuries or diseases, especially those that might be in the field of radiation or [fol. 292] claimed to be in that field?

A. Well, we have set up in—our general rule is that we will handle or deal with construction personnel in the same manner that we handle or deal with operating personnel working under similar circumstances. This is a general rule we follow.

We treat construction personnel the same way that we

treat operating personnel. If an operating man is working in an area, he needs certain protection and certain monitoring, or can only work for a certain number of hours, the same rules apply to the construction people.

This involves from time to time having, under these rules having physical examinations, uranalysis, for the construction people just as we would have for the operating people.

These physical examinations or uranalyses are given by the medical staff of the Carbide organization for us.

Q. What has the Atomic Energy Commission done toward the establishment of policies and procedures in the management areas of Ferguson's operations? Let's talk about such things as litigation or many of the other items that are within the management field, we would say, handling of privileged communication, microfilming out there, publication of periodicals, and so on, information acquired.

What have you done about that, or what do you do [fol. 293] about it?

A. Well, in each of these cases you have mentioned, Ferguson must get AEC specific approval for any item that you have mentioned in which they are to get reimbursed. In other words, they must get AEC's approval before instituting any litigation, and must get AEC's specific approval before instituting a program of company publication.

I have forgotten the other item you mentioned.

Q. What about insurance or bonds? Carrying of insurance or the filing of bonds?

A. We have specific instructions to Ferguson on each of these subjects. Our instruction to Ferguson on insurance is that they will not carry insurance—this is on property—as, of course, all of the property is Government owned, and we are our own self-insurers.

Q. What about workmen's compensation coverage?

A. They do carry workmen's compensation. We give specific approval in each of these instances.

Q. And the cost of the premium for workmen's compensation coverage, of course, is taken care of as an expense item in the operation of the contract?

A. This is correct.

Q. I want to show you here several papers which I am

going to file as collective Exhibit F-27, the first of which deals, I believe, with the subject we are just immediately [fol. 294] talking about, workmen's compensation coverage, does it not?

A. Yes, sir.

(Exhibit No. F-27 was filed.)

Q. And indicates your approval, that is the approval of your office through you, of a rider to the workmen's compensation coverage, I believe?

A. That is correct.

Q. The second of these letters is addressed to you from H. K. Ferguson requesting something in the field of insurance, is it not?

A. Yes, sir, that's where Ferguson is asking for AEC's approval to, among other things, hire an insurance adviser or pay an insurance organization for their advice.

Q. And the letter found on page 3 seems to be in response to that communication?

A. That is correct, in which we do not agree with Ferguson and so advise them.

Our letter on page 3 in part agrees with Ferguson, that is, as to the insurance coverage, but we disagree with them and advise them as to the use of an adviser on a reimbursable basis.

Q. The last sentence in the next to the last paragraph in that communication refers, I believe, to the personnel of the Atomic Energy Commission which could be used by [fol. 295] Ferguson for the same purpose for which they had requested employment of this individual?

A. Yes, sir, that is the next to the last paragraph, I believe, of the letter.

Q. Did the Atomic Energy Commission through your office set up a list of reports that the Ferguson company was required to furnish to you people from time to time during its operation on this contract?

A. Yes, sir.

Q. Was there submitted for the convenience of the Ferguson company as well as yours a chart showing the number of reports that they were required to submit and the dates for submission of these various reports, and a general outline of the contents or purpose thereof?

A. Yes, sir.

Q. What was the date that this request for reports of this type was originally submitted by your office through you to the Ferguson company?

A. These original instructions were issued shortly after the award to Ferguson of their contract, and they appear here under date of August 24, 1955.

Q. You have here a copy of the letter which accompanied the submission or delivery to Ferguson of this chart for reports and also copy of the chart itself?

A. Yes, sir.

[fol. 296] Q. Will you file this, please, as Exhibit F-28.

(Exhibit No. F-28 was filed.)

(A recess was had.)

Q. Mr. Bonnet, in connection with the audits that are made of the expenditures of The H. K. Ferguson Company under its contract with the Atomic Energy Commission, can you explain how those audits are handled? Does The H. K. Ferguson Company conduct its own audit?

A. Yes, sir. We have a program—here again this is spelled out in their standard procedures which we give to Ferguson where we expect and prescribe that the integrated contractor of this type will have his own system of internal audits. And Ferguson does have a system of internal audits for their various activities.

Q. Is that audit by Ferguson of its activities at Oak Ridge under its contract conducted at Oak Ridge, or is it conducted at the home office in Cleveland?

A. Some of these audits are conducted at Oak Ridge, and the financial audit is conducted by Ferguson in their Cleveland office.

Q. Originally, in the early days, was that true, or were they conducted at Oak Ridge?

A. This financial audit was originally conducted in Oak Ridge.

Q. Why was it changed to Cleveland? And explain, please.

[fol. 297] A. This financial audit deals basically with the reconciliation of the bank account which is maintained by Ferguson.

Q. Is that the bank account of Government funds?

A. This is the bank account of our Government advanced funds. It involved a check being made internally in Ferguson to be sure that the bills or vouchers received by Ferguson were promptly and properly paid. The objective here is to be sure that the individual writing of checks and paying the bills is not the same individual or the same office as is reconciling the bank account.

So that originally we had in this connection the Ferguson company locally receiving the bills or vouchers from vendors, write checks in payment thereof, these checks were then held by the Hamilton National Bank until an auditor from the home office of Cleveland came to Oak Ridge; he would go to the bank and get the checks, which involved not only checks to vendors, but payroll checks also, would reconcile these cancelled checks from the bank against the bills presented by the suppliers, and against the payrolls for personal services; and in this way would assure that there had been no duplication in payment nor had any bills been improperly paid.

However, after this system had been in force for several months, in one of our AEC reviews, we came to the conclusion that the same purpose could be served and at less expense to the Government if this reconciliation were done in the Cleveland office of Ferguson rather than in Oak Ridge.

Q. The Government was paying as part of the expense of this contract for this auditor that would come down from Cleveland?

A. That's right. And he would spend three or four days in Oak Ridge making this audit, and this involved his travel to and from Oak Ridge, and this would take place on a monthly basis.

So we instructed Ferguson to discontinue this practice, and approved the procedure whereby the Hamilton Bank sends the checks to Ferguson's Cleveland office, Ferguson here locally sends copies of the vouchers and the payrolls to their Cleveland office, and in Cleveland a member of Ferguson's finance division there reconciles in Cleveland the cancelled checks against the vouchers, copies of vouchers which the suppliers have presented, and copies

of the payrolls which Ferguson has prepared here in Oak Ridge.

When this reconciliation is completed in Cleveland, the cancelled checks are returned to Oak Ridge for the permanent records here. And, of course, the copies of the vouchers have served their purposes, and the originals are here in Oak Ridge, so the copies are destroyed in Cleveland. [fol. 299] Of course, AEC further audits Ferguson's Cleveland audit here in Oak Ridge. They do this on about a three or four months basis. They don't do it on a monthly basis.

Q. Ferguson's audit at Cleveland is done monthly?

A. That's correct.

Q. And AEC checks, audits, or whatever you may call it, the Ferguson audit on about a three or four month basis?

A. That is correct.

Q. And is that audit still checked or further audited again?

A. The General Accounting Office on a year or two year basis follows up and checks our AEC auditors.

Mr. R. R. Kramer: That's all.

Cross-examination.

By Mr. Rice:

Q. Mr. Bonnet, does the Atomic Energy Commission presently have or has it ever had employees who are artisans such as carpenters, plumbers, electricians, steam-fitters?

A. You mean directly on our AEC payroll?

Q. Yes.

A. Not to my knowledge in Oak Ridge.

Q. It has never to your knowledge maintained any employees of those classifications?

A. No, sir, not to my knowledge.

[fol. 300] Q. It has been the policy of the Commission, I take it, since 1947 when it first took over the project, to have performed those maintenance, repair, and construction services that are necessary by or through the medium of private contractors?

A. That is correct.

Q. And the Commission has never undertaken to do any of that work itself?

A. Not to my knowledge.

Q. What is its reason, Mr. Bonnet, for engaging contractors to do that work rather than undertaking to do it through its own employees?

A. I can only give you my understanding of the basic policy, the policy established by the Commission itself in Washington, and I can only give you my understanding of the policy.

A number of reasons. One is that the Commission feels that this gives them more flexibility in a fluctuating program that we can expand or contract the work forces of the project more promptly, more easily, and I may say more economically by having carpenters and plumbers and brick-masons, and so on, on a contractor's payroll rather than directly on the Government's payroll.

Another reason that I personally believe, and I have been in the Government business a long time, that by and large [fol. 301] the work can be performed cheaper by means of construction contractors on private payroll rather than on Government payroll. This is a personal opinion. I can't give this as a reason, necessarily a reason behind the Commission's establishment of this policy.

Q. I think perhaps you have had enough experience to qualify as an expert.

What was the date that Ferguson came into the picture at Oak Ridge?

A. The best of my recollection, their contract is effective August 23, 1955. I believe it is some such date.

Q. I think that is correct. Prior to that date, were these maintenance, repair, construction, and alteration services performed through lump sum contractors?

A. No, sir. As I attempted to explain this morning, we had other integrated type of construction contractors, such as Maxon, Rust, and so on, performing large construction programs in Oak Ridge, under reimbursement type contracts. And along with this major task assigned to such construction contractors, we assigned these miscellaneous jobs of maintenance and alterations of the various facilities such as Ferguson is now performing.

Q. Was the operating relationship between the Atomic Energy Commission and those prior contractors back to 1947 the same as it is with Ferguson today?

[fol. 302] A. Each kind the same, yes, sir.

Q. I believe you stated this morning in your testimony that Ferguson does not operate upon a budget.

A. That is correct.

Q. The funds are simply allocated to them from time to time as they required them in the performance of their work?

A. This is correct. On a monthly basis generally. Of course, they may have a lot of bills that come in at the end of the calendar or end of the fiscal year, and we would have to supplement their advance of funds in those particular circumstances on a bi-weekly or on a three-week basis rather than on a monthly basis.

Q. You stated at one point in your direct testimony this morning that there had been some changes in details of accounting procedure in recent years with respect to Ferguson.

Can you elaborate upon that a little bit?

A. I am sorry, I don't recall in what connection I gave that testimony. Perhaps if I knew the connection in which I gave it, I could elaborate on it.

Q. Well, I don't recall it right now either.

A. I may say that accounting procedures, as many of our procedures, change from year to year. It seems that none of our rules stay stationary. We hope that they are [fol. 303] all changes which show improvement, and greater efficiency. But I don't recall, sir, just in what connection I gave this testimony.

Q. We can eliminate it.

Now is the actual physical work of doing these repair, maintenance, alteration and construction services carried on by Ferguson's own employees? That is, the actual manual work?

A. Yes, sir.

Q. Is that under the supervision of their own foremen and superintendents?

A. It is directly under the supervision, the day and day, hour and hour, minute by minute, supervision of the fore-

men and general foreman and craft superintendents; yes, sir.

Q. AEC maintains no people in the capacity of foreman or superintendent who have any jurisdiction over these manual employees. Is that not true?

A. I would say in the classification of foreman I would classify my engineers in the field somewhat in the same category as a Ferguson superintendent. In other words—

Q. But those people do not give direction to Ferguson's employees in the actual performance of the work?

A. They would give instructions to the superintendent or to the management, but not to the craftsmen.

[fol. 304] Q. Those instructions would be relayed through channels?

A. That is correct. By the same token, the general superintendent for Ferguson, of course, would not give instructions directly to a carpenter or to a plumber. These instructions must come down through the general foreman to the foreman and in turn to the individual craftsman.

Q. Does AEC have anything at all to say about the relationship of Ferguson to its employees and vice versa?

A. Well, I think we do in the sense that I have testified, as to what salaries they will pay the employees—

Q. I understand that.

A. —what vacations, what fringe benefits, and so on.

Q. I understand that, I think. If a Ferguson employee or several in a group of Ferguson employees should have a grievance, would they come to somebody in the AEC, or would they go to Ferguson's own management?

A. We would insist, and they do go to Ferguson's own management first. We do have from time to time where union representatives feel that they are not getting the proper hearing from Ferguson's own management, and they do and have come directly to AEC representatives.

We discourage this. We think this is poor management, but they do do it.

[fol. 305] Q. Do you ever accord them hearings when they seek them with you?

A. Yes, sir.

Q. Who actually negotiates with the unions?

A. You refer to labor agreements?

Q. Yes.

A. The actual negotiations are done by the contractors in Knoxville. Now Ferguson, as a national contractor, would not move into an area and make it a practice of negotiating pay scales or—you asked about negotiations of labor contracts.

The way it works is this: That Ferguson, like all national contractors, when they move into an area like Oak Ridge or Knoxville, follows the practices and policies of the local contractors. This is generally known as the Associated General Contractors.

These contractors in Knoxville negotiate with the various trades. The general contractors negotiate with such crafts as the laborers, the carpenters, the millwrights, the teamsters which are the truck drivers, perhaps one or two others, the specialty crafts. This is like the pipefitters. They negotiate with an association here of mechanical contractors. The electricians union negotiates with an association of electrical contractors.

But after these negotiations are conducted in Knoxville [fol. 306] by these local contractors, for example, that the rate of pay for electricians is going to be increased from \$2.20 to \$2.30 per hour effective July 1st, with further increase of five cents an hour effective the following January, then Ferguson follows that same pattern that has been established by the local contractors.

The point I want to make is that the actual negotiations is conducted by the local contractors, and that following this pattern as to travel allowance or hours of work or rates of pay, then Ferguson follows this general pattern, and signs similar agreements with the trades involved.

But as you can see, it would be highly irregular and in fact to a contractor's mind, and to my mind also, impractical and unethical for a large contractor or such a national contractor to move into a local area and to establish rates of pay and working conditions which are contrary to the local area.

In essence, we tell the contractor in their general instructions to them that he must follow local area practices. We will not reimburse him if he signs some agreement

which is entirely contrary to the prevailing practices in the area.

Q. But the actual negotiations with the unions preliminary to collective bargaining agreements are carried on by [fol. 307] the contractor, are they not?

A. To the extent I have just described, they are, yes, sir.

Q. AEC is not a party to those negotiations at all?

A. No, sir. We approve the agreements which Ferguson proposes to enter into, but we do not actively participate in the working up the details of the agreement.

Mr. Rice: I believe that's all.

Mr. R. R. Kramer: I believe we have nothing more.

[fol. 72]

EXCERPT FROM EXHIBIT "C-8"

Modification No. 37

Supplemental Agreement to Contract No. W-7405-Eng-26

SUPPLEMENTAL AGREEMENT

This Supplemental Agreement, entered into this 14th day of June, 1956, by the United States of America (hereinafter referred to as the "Government"), represented herein by the United States Atomic Energy Commission (hereinafter referred to as the "Commission"), and Union Carbide and Carbon Corporation (hereinafter referred to as the "Corporation"), a corporation organized and existing under the laws of the State of New York, with its principal office at 30 East 42nd Street, New York, New York;

Witnesseth That:

Whereas, the Commission has heretofore elected, pursuant to legal authority, to enter into an agreement (designated as Contract No. W-7405-Eng-26) with the Corporation under which the Corporation has undertaken the execution of certain functions for the Commission involved in and associated with the production of special nuclear material and the conduct of atomic energy research and development in the facilities of the Commission hereinafter described; and

Whereas, such agreement arose out of the need for the services of an organization with personnel of proved capabilities, both technical and administrative, to manage and operate certain facilities of the Commission and to perform certain work and services for the Commission; and the Commission recognizes the Corporation as an organization having such personnel, and that the initiative, ingenuity and other qualifications of such personnel should be exercised in providing such services under the agreement, to the fullest extent practicable; and

Whereas, the Corporation recognizes that attainment of the Commission's over-all objectives and discharge of its responsibility for economy and efficiency in the conduct of the atomic energy program require the Commission's general direction of the program, supervision of Government-

financed activities of organizations managing Commission facilities and related functions so as to assure conformity with applicable law and policies of the Commission, and full access to information concerning such activities; and that the Commission's program of administration under the Atomic Energy Act requires integration and coordination of such activities which the various organizations may be in a position to perform, for the utilization of their services and of information, materials, facilities, funds and other property of the Commission, in the manner most advantageous to the Government; and [fol. 73] Whereas, the said agreement has since been amended; and

Whereas, consistent with the foregoing, the parties desire to further modify the aforesaid agreement for the purpose of integrating the contract and its previous modifications and for the further purpose of more clearly reflecting the intent and objectives of the agreement; and

Whereas, this Supplemental Agreement is authorized by and negotiated under the Atomic Energy Act of 1954 in the interest of the common defense and security;

Now, Therefore, in consideration of the mutual agreements and undertakings of the parties, the parties hereto do hereby agree that this Supplemental Agreement states all of the provisions of this Contract No. W-7405-Eng-26 in effect subsequent to the effective date of this Supplemental Agreement, so that they shall read in their entirety as follows:

Article I—Engagement of Corporation—Description of Facilities

The Government expressly engages the Corporation to manage, operate and maintain the plants and facilities described below, and to perform the work and services described in this contract, including the utilization of information, material, funds, and other property of the Commission, the collection of revenues, and the acquisition, sale or other disposal of property for the Commission, subject to the limitations as hereinafter set forth. The Corporation undertakes and promises to manage, operate and maintain said plants and facilities, and to perform said work and services, upon the terms and conditions herein provided

and in accordance with such directions and instructions not inconsistent with this contract which the Commission may deem necessary or give to the Corporation from time to time. In the absence of applicable directions and instructions from the Commission, the Corporation will use its best judgment, skill and care in all matters pertaining to the performance of this contract.

The facilities to be managed, operated and maintained by the Corporation hereunder consist of the following Government-owned buildings and facilities, together with the utilities and appurtenances thereto, located at Oak Ridge, Tennessee, and Paducah, Kentucky:

A) At Oak Ridge, Tennessee:

1) Gaseous Diffusion Plant (which, in addition to the original K-25 section, includes the K-27, K-29, K-31 and K-33 sections and UF₆ Feed Section subsequently added, and facilities for the manufacture, assembly or modification of certain items of highly classified material and equipment) commonly known and hereinafter sometimes referred to as the K-25 Plant.

[fol. 74] 2) Electromagnetic Separation Plant (including the Alloy Development Plant) commonly known and hereinafter sometimes referred to as the Y-12 Plant.

3) Oak Ridge National Laboratory, hereinafter sometimes referred to as the Laboratory.

B) At Paducah, Kentucky:

1) Gaseous Diffusion Plant (comprised of the C-31, C-33, C-35 and C-37 sections, a UF₆ Feed Manufacturing Plant and auxiliary and service facilities), commonly known and hereinafter sometimes referred to as Plant C.

Article II—Description of Work and Services

A) K-25 Plant and Plant C

1) The Corporation shall manage, operate and maintain the K-25 Plant and Plant C in accordance with

programs approved in writing from time to time by the Commission to produce Product K-25 (material enriched in the Uranium 235 isotope by the gaseous diffusion method) in the amount and at the rate required, within the capacity of the K-25 Plant and Plant C, by schedules to be provided by the Commission. The Corporation will not be required to operate the K-25 Plant or Plant C in any manner which it deems unsafe to the plants or personnel.

2) In accordance with plans and programs approved by the Commission from time to time, the Corporation shall perform research and development services incidental or related to process improvement, production of feed materials, decontamination, instrument development, recovery of waste materials and basic research pertinent to plant operation or product.

B) Y-12 Plant

1) The Corporation shall manage, operate and maintain the Y-12 Plant in accordance with programs approved in writing from time to time by the Commission, for the performance of the following functions:

(a) Production and Process Improvement

(1) Convert in final chemistry to the desired form and purity the K-25 product, including intermediate assay material; and develop improved processes for this operation.

[fol. 75] (2) Process the product from final chemistry and similar materials from other sources within the Commission and develop improved methods for this operation. Process normal and depleted material in accordance with the Commission's requirements.

(3) Perform operations for the recovery of source and special nuclear materials.

(4) Furnish, to the extent requested by the Commission and agreed to by the Corporation, all materials, supplies and services (including personnel) necessary for the maintenance in standby condition of all parts of the Y-12 Plant which are not used by

the Corporation in the operations and activities hereunder.

(5) Operate the Alloy Development Plant for the production of the ADP Product in such quantities and at the rate required, within the plant capacity, by schedules to be provided by the Commission. The Alloy Development Plant, its operating process and the ADP Product are described in Secret Letters from the Commission to the Corporation, dated March 25, 1953 and June 13, 1955.

(b) Research and Development

(1) Perform chemical research and development related to source and fissionable materials.

(2) Concentrate the isotopes of the various elements by the electromagnetic process.

(3) Conduct a program of fundamental research on the electromagnetic method of separating the uranium isotopes.

(4) Conduct experimental programs for which the electromagnets at Y-12 are adaptable.

(5) Develop improved methods of recovering uranium from low grade ores, shales, and wastes.

(6) Develop improved analytical and assay methods and perform research in spectroscopy and spectrometry.

(7) Develop methods of separating the isotopes of uranium by means other than the electromagnetic process.

[fol. 76] C) Oak Ridge National Laboratory

The Corporation shall manage, operate and maintain the Oak Ridge National Laboratory, in accordance with programs approved in writing from time to time by the Commission. Such programs may include, but will not be limited to, the following:

1). Fundamental research in biology, chemistry, physics, and related sciences; associated with the utilization of the facilities of the Oak Ridge National Laboratory.

2) Research, development and engineering of chemical and other processes.

3) Research, development, production and distribution of isotopes.

4) Supporting and allied research.

5) Inauguration and advancement of broad participation by academic institutions and industry in research, engineering, development and training.

D) Portsmouth Plant

To the extent authorized or approved by the Commission, the Corporation shall perform the following services in connection with the design, construction and preparation for operation of a new gaseous diffusion production plant now under construction near Portsmouth, Ohio:

1) Process design, including research, development and engineering of process, auxiliaries and utilities; design, engineering and development of special equipment items, such as pumps, seals, converters, coolers, instruments and stage control valves.

2) Procurement of certain components of process equipment items which the Corporation will assemble.

3) Scheduling of, and rendering of procurement assistance to the Commission in; the procurement of such process items as the Commission shall procure.

4) Preparation of various items of process equipment for initial installation, manufacture, assembly or modification of certain items of highly classified material and equipment; inspection and technical assistance to the Commission's operating contractor at Portsmouth in conducting pre-operational runs and tests of the production and supporting facilities prior to acceptance for operation, to the extent mutually agreed by the parties.

[fol. 77] 5) It is understood that the Portsmouth Plant will be operated by another Commission management contractor. The Corporation shall furnish

to the operating contractor for the Portsmouth Plant such technical assistance as may be mutually agreeable in connection with activities incident to pre-operational testing and preparation for and commencement of operation of the plant.

E) Construction Services

Upon request of the Commission and acceptance thereof by the Corporation, the Corporation shall procure for the Commission the construction of new facilities or the alteration or repair of the existing Government-owned facilities at the Plants and Laboratory. Any agreement entered into hereunder shall be subject to the written approval of the Commission and shall contain the provisions relative to labor and wages required by law to be included in contracts for the construction, alteration or repair of a public building or public work.

F) Related Services

1) In addition to the services specifically described in other provisions of this Article II, the Corporation shall perform such other services, incidental or related to the services described in this Article II or to the programs of the Commission (including, without limitation, engineering, design, procurement, inspection, testing, installation and related services in connection with the construction of new facilities and additions to, or rearrangement of, existing facilities), as the Commission and the Corporation shall agree in writing from time to time will be performed under this contract either for the Commission or its contractors, at Oak Ridge or elsewhere. The costs incurred by the Corporation in performing such services shall be allowable costs hereunder. Such additional services shall be performed without additional fee, unless the Commission and the Corporation shall mutually agree in writing that they constitute a material increase in the scope of the work under this contract, in which event the parties hereto will negotiate in good faith to agree upon an equitable fee for

such additional services. The fee so agreed upon shall be effected by supplemental agreement to this contract.

2) The Corporation, to the extent it is in a position to do so, will render such services, including transfers of property, to Federal agencies and to other cost-type contractors of the Commission at Oak Ridge, Tennessee, or elsewhere, as the Corporation is able to render without interfering substantially with the performance of its other responsibilities hereunder and as may be requested by such other cost-type contractors who represent to the Corporation that such services are required in connection with the performance of their contracts, or, in the case of [fol. 78] other Federal agencies as approved or directed by the Commission. Such services shall be rendered on mutually agreeable terms and conditions and the Corporation will receive transfers of funds therefor from such Federal agencies and other cost-type contractors to the extent that such transfer is required by and in accordance with policies adopted from time to time by the Commission. The funds received in exchange for such services shall be handled as a part of the advances of Government funds as provided in Article VI. In the performance of such services the Corporation is authorized to use facilities, materials and equipment in its custody under this contract. The costs incurred by the Corporation in the performance of any such services, shall be allowable costs in accordance with the provisions of Article IV; and the Corporation shall receive no additional fixed fee for the performance of such services. With the approval of the Commission, the Corporation may render the same services, including transfers of property, to lump-sum or unit-price Commission contractors under the terms and conditions herein stated, and the payments received therefor shall be for the account of the Government and will be received, held, and utilized as a part of the advances of Government funds, pursuant to Article VI.

G) General

1) During the performance of this contract, the work and services shall be conducted under the full-time resident direction of a duly authorized representative of the Corporation approved by the Commission. All notices, instructions, and directions which the Commission may give to the Corporation may be directed to such representative and shall constitute notice to the Corporation thereof.

2) In carrying out the work under this contract, the Corporation shall subject to the general control of the Commission, do all things necessary in the best judgment of the Corporation in the management, operation and maintenance of the Plants and Laboratory; provided that, whenever approval or other action by the Commission is required with respect to any expenditure or commitment by the Corporation under the terms of this contract, the Government shall not be responsible unless and until such approval or action is obtained or taken.

3) In carrying out the work under the contract, the Corporation shall be responsible for the employment of all professional, technical, skilled and unskilled personnel engaged and to be engaged by the [fol. 79] Corporation in the work hereunder, and for the training of personnel. Persons employed by the Corporation shall be and remain employees of the Corporation, and shall not be deemed employees of the Commission or Government; provided, that nothing herein shall require the establishment of an employer-employee relationship between the Corporation and consultants and others whose services are utilized by the Corporation for the work hereunder.

4) The administration of all contracts made by the Corporation, including responsibility for payment from the Government funds advanced and agreed to be advanced hereunder to the Corporation, shall remain in the Corporation unless and until transferred to the Government or other designee of the Commission, at the direction or with the approval of the Commission.

5) The Corporation shall exert its best efforts to

acquire for the Government such materials, supplies, equipment and facilities required in connection with the work under this contract, as are not furnished by the Government. The Corporation shall be free (but shall not be obligated) to furnish items of such materials, supplies, equipment and facilities of its own manufacture (or, of the manufacture of its subsidiary corporations), provided it advises the Commission in advance as to the respective prices and conditions connected with such furnishing, and provided, further, that the Commission acquiesces therein.

6) The Corporation shall make necessary repairs, alterations, additions or improvements to the buildings and facilities of the Plants and Laboratory, to the extent such work is included in programs approved in writing by the Commission. Projects which, under applicable procedures adopted by the Commission from time to time, require the issuance of a directive therefor by the Manager of the Commission's Oak Ridge Operations Office, shall not be undertaken until such directive has been issued.

7) The Corporation shall, to the extent requested by the Commission and consented to by the Corporation, perform maintenance, protective and service functions in portions of the Oak Ridge Area outside the Plant and Laboratory Areas.

8) The Corporation shall perform, or secure the Performance of, the work and services necessary for or incidental to the preparation for presentation to the public of exhibits designed to depict and explain to members of the public the nature of the scientific processes involved in the Commission's nuclear energy program, particularly with reference to the work performed under this contract including, [fol. 80] but not limited to, the transportation, crating, uncrating, arrangement and servicing of such exhibits in connection with their presentation at New York, New York, Oak Ridge, Tennessee, and other points as the Commission shall request from time to time.

Article III—Consideration

To cover the costs of and in full and complete compensation for its performance and undertakings hereunder, the Corporation shall receive the following:

A) Allowable costs and expenses as provided for in Article IV hereof.

B) Fixed fee as follows:

1) (a) For all work under this contract, except as provided in subparagraph (b) below, a fixed fee in the amount of Two Hundred Twenty-nine Thousand, Two Hundred Fifty Dollars (\$229,250.00) per month.

(b) It is recognized that as of the effective date of Modification No. 37, certain work and services in connection with the design and construction of various Commission installations (including the services described in Paragraph D), Article II, above, and the services described in Modification No. 34) may not have been entirely completed and that fixed fees in stated amounts for certain of such services have been agreed upon under previous modifications to the contract (Modifications Nos. 33 and 35). Accordingly, the parties agree that execution of the aforesaid Modification No. 37, shall in no wise affect the performance of, or payment of fixed fees for, the performance of any such work and services in accordance with the terms of said previous modifications.

Article IV—Allowable Costs

A) The costs allowable under this contract shall be all costs and expenses which are actually incurred by the Corporation and which are necessary or incident to the performance of the work under this contract, except those costs and expenses which are unallowable under Paragraph C) of this article. The following are examples of allowable [fol. 81] costs. The failure to include, however, any item of expense in the list of examples of allowable costs is not intended to imply that any such expense is either allowable or unallowable:

1) The cost of all materials, tools, machinery, equipment, supplies, services, utilities, power, fuel and, in

accordance with Appendix "A", which is hereby incorporated by reference and made a part of this contract, the cost of all labor (whether as wages, salaries, benefits, or other compensation) necessary for either temporary or permanent use for the carrying out of or for the benefit of the work to be performed by the Corporation hereunder and not furnished by the Government. The payment of any extra compensation or discontinuance wages, travel expenses and any expenditures, pursuant to the maintenance of welfare or other plans for the benefit of the employees, shall be included as a part of the labor costs hereunder to the extent that such payments or expenditures are consistent with the Corporation's general employee relation policies, or are incurred pursuant to an agreement made as a result of collective bargaining with representatives of the Corporation's employees and are in accordance with Appendix "A" or amendments thereto, or other form of written approval, it being intended that the Corporation may treat its employees engaged in the work hereunder no less favorably than other employees of the Corporation whose services are not used in the performance of this work. In case the full time of any employee of the Corporation is not applied to the work, his salary shall be included in this item only in proportion to the actual time applied thereto. No person shall be assigned to service by the Corporation as superintendent, chief engineer, chief purchasing agent, chief accountant or similar position at any Plant, or as principal assistant to any such person, until there has been submitted to and approved by the Commission a statement of the qualifications, experience, and salary of the person proposed for such assignment. The payment of any excess salary over the scheduled amounts shown in Appendix "A" or amendments thereto shall not be an allowable cost, unless and until the Commission has so approved in writing.

2) Amounts payable under all subcontracts made in accordance with the provisions of this contract.

3) The cost of all studies made by qualified organizations or persons in accordance with the provisions

of this contract with regard to technical and other problems.

4) Transportation charges on materials, equipment and supplies.

5) Transportation and traveling expenses of the necessary field forces for the economical and successful prosecution of the work, living expenses, to the extent consistent with the Corporation's established policies, as approved in writing by the Commission, for such [fol. 82] forces while they are in a travel status; and return when such services are no longer required; expenses of procuring and training labor (including supervisory, manual and all other labor) and expediting the production and transportation of material and equipment.

6) The cost of buildings, trade fixtures and equipment required for necessary field offices and other facilities, and the cost of maintaining and operating such field offices and other facilities.

7) Premiums on such bonds and insurance policies as the Commission may approve or require as reasonably necessary for the protection of the Government or the Corporation. In every instance where this contract requires or permits the United States to pay the premium on a bond or insurance policy either directly or ultimately as an allowable cost, the bond or insurance policy shall contain an indorsement or other recital excluding by appropriate language any claim on the part of the insurer or obligor to be subrogated, on payment of a loss or otherwise, to any claim against the United States.

8) Losses and expenses, not compensated by insurance or otherwise (including settlements made with the written consent of the Commission), actually sustained by the Corporation in connection with the work unless treatment as an allowable cost is expressly prohibited.

9) The cost of reconstructing and replacing any of the work destroyed or damaged, and not covered by insurance.

10) Payments made by the Corporation under the

Social Security Act, and any disbursements required by law which the Corporation may be required on account of this contract to pay on or for any plant, equipment, process, organization, materials, supplies or personnel.

11) Disbursements incident to payment of payrolls, including but not limited to, the cost of disbursing cash, necessary guards, cashiers, and paymasters. If the payments to employees are made by check, facilities for cashing checks must be provided without expense to employees, and the expenses of the Corporation in connection therewith shall be allowable costs.

12) The cost of accounting (including salaries and other expenses) in connection with special audits of accounts for the Government in connection with work hereunder.

13) Expenses in connection with the maintenance and repair and any temporary or permanent closing down of the Plants or Laboratory.

[fol. 83] 14) All telephonic and telegraphic communications (including teletype and facsimile), cablegrams, radiograms, and similar messages that may be sent by the Corporation pertaining directly to the contract for work to be done or materials to be furnished thereunder.

15) The cost of reworking material.

16) Expenditures by the Corporation to reimburse other employers for salaries and wages paid by them to their employees released for and engaged in performance of the Corporation's undertakings hereunder; the pro rata share of welfare and other employee relations benefits accruing to such employees during the period for which they are loaned; and Federal Insurance Contributions Act payments and Federal and State unemployment compensation tax payments paid on such borrowed personnel by such employers.

17) The cost, including any loss, incurred in operating at the Plants and Laboratory any cafeteria or cafeterias for the benefit of the employees.

18) Such expenditures and disbursements as are made in connection with the provisions of Article XXX, "Guard and Fire-Fighting Forces".

19) To the extent that Corporation has agreed to take over liabilities accruing under subcontracts or other agreements under Contract No. W-7405-Eng-50, and to the extent the Commission has approved Corporation's assuming such liabilities, all costs incurred as a result of taking over such liabilities, including but not by way of limitation the Corporation's settlement thereof with the approval of the Commission, shall be allowable costs.

20) To the extent that Corporation has agreed to take over liabilities accruing under subcontracts or other agreements under Contract No. W-7405-Eng-23 and Contract No. AT-33-1-Gen-53, and to the extent the Commission has approved Corporation's assuming such liabilities, all cost incurred as a result of taking over such liabilities including but not by way of limitation the compromise or settlement thereof with the approval of the Commission, shall be allowable costs.

21) Costs and expenses incurred in connection with the performance of the services described in Section G) 8) of Article II.

22) Litigation expenses, including counsel fees, incurred in connection with actions initiated by the Corporation as required or approved by the Commission [fol. 84] or in defending against claims involving questions of liability to third parties arising under the contract; provided, however, that no such expense shall be an allowable cost hereunder if it is incurred in connection with an action or claim arising out of the wilful misconduct or bad faith on the part of any of the corporate officers of the Corporation in the performance of the work under this contract.

23) Such other items not expressly included by other provisions of this contract as should, in the opinion of the Commission, be included as an allowable cost. When such an item is allowed by the Commission, it shall be specifically certified as being allowed under this subsection.

24) If approved in writing by the Commission in advance, permit and license fees and royalties on patents used including those owned by the Corporation.

B) The Government reserves the right to pay directly to the persons concerned all sums due from the Corporation for labor, materials, or other charges.

C) No salaries of the Corporation's corporate officers shall be included as allowable costs. No part of the expense incurred in conducting the Corporation's main office or regularly established branch offices, and no overhead expense of any kind, except as specifically authorized in Section A) of this article, shall be included as an allowable cost nor shall any interest on capital employed or on borrowed money be included as an allowable cost.

D) The Corporation shall take all known and permissible cash and trade discounts, rebates, allowances, credits, salvage, commissions, and bonifications.

E) All revenue received by the Corporation from its operations hereunder including, but not limited to, the distribution of isotopes, the operation of hospital, commissaries, or other facilities, and rebates, discounts, refunds, etc., shall be for the account of the Government and shall be received, held and utilized as part of the advances of Government funds pursuant to Article VI.

Article V—Payments

A) 1) *Payment for Allowable Costs.* Payment for allowable costs shall be made by the Corporation from the special bank account or accounts, consisting of advances of Government funds and revenues received in the performance of the contract work, which are [fol. 85] described in Article VI below; except that the Commission may approve the Corporation's temporary use of its own funds in emergencies or other special circumstances. The Corporation shall also be paid the amount of any allowable costs and expenses which may be or become due and payable subsequent to the liquidation of or final accounting for such advances.

2) The Corporation shall prepare and submit annually a certified voucher, for the total of net expenditures accrued (i.e., net costs incurred), for the period covered by the voucher, and the Commission, after audit and appropriate adjustment, will approve such voucher. This approval will be based on periodic

audits made by the Commission during the year and the Corporation will be advised of the results of these audits. The approval by the Commission will constitute an acknowledgement by the Commission that the net costs incurred were allowable under the contract and that they have been recorded in the Corporation's accounts in accordance with Commission accounting policies, but will not relieve the Corporation of responsibility for the Commission's assets in its care, or for errors later becoming known to the Commission; nor will such approval affect the audit responsibilities of the General Accounting Office.

B) Payment of Fixed Fee

The fixed fee provided for in Paragraph 1) of Section B) of Article III shall be paid in monthly installments as it accrues.

C) Final Payment

Upon completion of the work and services hereunder, the Government shall pay to the Corporation the unpaid balance of the Corporation's fee, less any claim the Government may have against the Corporation, and the Corporation and the Commission shall thereupon settle or agree upon the manner for settling outstanding items of allowable costs to the extent not otherwise provided for by the provisions of this contract. Prior to final payment and as a condition thereto, the Corporation shall furnish the government with a release of all claims against the Government arising under and by virtue of this contract other than such claims, if any, as are specifically excepted by the Corporation from the operation of the release in stated amounts to be set forth therein.

Article VI—Advances of Government Funds

A) Advances

It is the intent of the parties that the Corporation shall not be required to utilize its own funds in making payments for allowable costs under this contract. Accordingly, the

[fol. 86] Government shall advance to the Corporation, from time to time, (generally weekly, but in any event at such times as in the opinion of the Commission the Corporation's need therefor develops) such Government funds (hereinafter referred to as "advances") as the Commission, after consultation with the Corporation, deems adequate to enable the Corporation to continue to make payments for allowable costs under this contract in furtherance of its performance. It is understood that such advances are not loans to the Corporation and will not require interest payments by the Corporation, and that the Corporation will acquire no right, title or interest in or to such advances other than the right to make expenditures therefrom for the purposes authorized in, and within the intent of, this contract.

B) Special Bank Accounts

All such advances, revenues and other moneys received for the account of the Government in the performance of the work (not including the Corporation's fixed fees) shall be deposited in a special bank account or accounts (hereinafter referred to as "special accounts") at a bank or banks satisfactory to the Commission, separate from the Corporation's own funds; the special accounts shall be designated as to indicate clearly to the bank their special character, purpose and title; the balances in special accounts shall be used by the Corporation exclusively for the purpose of making payments for allowable costs under this contract (including such amounts, considered reasonable by the Commission, as are expended by the Corporation in furtherance of the provisions of this article).

C) Excessive Balances

In the event either party is of the opinion, at any time or times, after consultation with the other, that the then balance of such special accounts is materially in excess of the Corporation's need in furtherance of its performance hereunder, the amount of such excess shall be promptly returned or accounted for to the Government in such manner as the Commission directs.

D) Title—Rights and Liabilities of Bank

All funds advanced and all funds deposited in special accounts shall remain the property of the Government. The Government's title to such funds shall be superior to any claim or lien of the bank or any other party upon the special accounts irrespective of the basis of such latter lien; provided, however, that the bank shall be under no liability to any party hereto for the withdrawal of any funds from special accounts through checks properly endorsed and signed by the Corporation, except that after the receipt by the bank of written directions from the Commission, the bank shall act thereon and be under no liability to any party hereto for any action taken in accordance with such written [fol. 87] directions. Any written directions received by the bank in due course, upon United States Atomic Energy Commission stationery, and purportedly signed by or at the direction of said Commission, shall, insofar as the rights, duties and liabilities of the bank are concerned, be conclusively deemed to have been properly issued and filed with the bank by said Commission.

E) Liquidation of Advances and Special Accounts

If, upon expiration of this contract, or upon its termination by either party, such advances and special accounts have not been fully liquidated, the unliquidated balance thereof shall be returned or accounted for to the Government in such manner as the Commission directs.

F) Inspection and Audit of Special Accounts

The Corporation shall at all reasonable times afford the Commission proper facilities for the inspection and audit of special accounts, and the Corporation's papers and data relevant thereto, and the Commission shall have the right (to the extent of the Corporation's rights), during business hours, to inspect and make copies of any entries in the books and records of the pertinent bank or banks, pertaining to special accounts.

G) Advances to Subcontractors and Materialmen

Subject to prior written approval of the Commission, the Corporation may make advances of Government funds out of special accounts to subcontractors and materialmen, upon such terms and conditions as the Commission approves in writing.

Article VII—Obligations

A) The amount presently obligated by the Government with respect to this contract is One Billion, One Hundred Thirty-Nine Million, Six Hundred Eighty-Two Thousand, Six Hundred Seventy-Three Dollars (\$1,139,682,673.00).

B) Prior to June 30, 1956, and prior to the end of each fiscal year thereafter (and at such other times as may be mutually agreed upon) the parties hereto shall jointly prepare a program and budget for the work to be performed by the Corporation during the fiscal year next following, and will thereupon prepare an estimate of the cost of all work previously performed by the Corporation (and to be performed by the Corporation through the balance of the then current fiscal year) and of all work to be performed by the Corporation during the first six months of the fiscal year next following. Whenever mutually agreed upon in writing (whether or not by written modification of this contract, and whether or not as a result of any estimate) the monetary obligation set forth in Section A) of this Article VII shall be deemed revised to accord with the amount thus agreed upon in writing, and such revised amount shall constitute an obligation with respect to this [fol. 88] contract against such funds or obligational authority as the Commission may designate. The Commission may increase the contract obligation unilaterally by written notice to the Corporation.

C) The Corporation shall not make expenditures or commitments, in the performance of a budgeted program, in excess of the amount budgeted for that program in the annual budget, unless and until the budgeted amount is increased by written agreement with the Commission.

D) Notwithstanding any other provisions of this contract, when and if the total allowable costs (including commitments actually incurred by the Corporation) plus fees

earned by the Corporation for the work performed pursuant to this contract shall equal the then current amount which has been obligated by the Commission with respect to this contract, the Corporation shall be excused from further performance under this contract and the Corporation shall not incur further costs or commitments in the performance of work under this contract unless and until the Commission shall increase the amount obligated with respect to this contract. The Corporation shall notify the Commission whenever it determines that additional funds will be required.

Article VIII—Term and Termination

A) This contract shall continue until June 30, 1960, unless sooner terminated by either party in accordance with the provisions which follow:

1) The performance of work under this contract may be terminated by the Commission in whole, or from time to time in part, (i) whenever the Corporation shall default in performance, and shall fail to cure the fault or failure within such period as the Commission may allow after receipt from the Commission of a written notice specifying the fault or failure, or (ii) whenever, but upon not less than thirty (30) days prior written notice to the Corporation, for any reason the Commission shall determine any such termination is for the best interest of the Government. Termination of the work hereunder shall be effected by delivery of a notice of termination specifying whether termination is for default of the Corporation or at the option of the Commission, the extent to which performance of work under the contract shall be terminated, and the date upon which such termination shall become effective. Any such termination shall be without prejudice to any claim which either party may have against the other.

2) The Corporation may terminate this contract at any time by giving not less than six (6) months prior written notice to the Commission.

3) Upon the receipt or giving of notice of termination, in accordance with subparagraph 1) or 2) above,

[fol. 89] the Corporation shall, to the extent directed in writing by the Commission, discontinue the terminated work and the placing of orders for materials, facilities and supplies in connection therewith, and shall proceed, if, and to the extent, required by the Commission to cancel promptly, and settle with the approval or ratification of the Commission, existing orders, subcontracts and commitments insofar as such orders, subcontracts and commitments are chargeable to this contract.

B) Upon the termination of this contract, full and complete settlement of all claims of the Corporation arising out of this contract shall be made as follows:

- 1) The Government shall assume sole responsibility for all obligations, commitments, and claims that the Corporation may theretofore in good faith have undertaken or incurred in connection with said work, the cost of which would be allowable in accordance with the provisions of this contract; and the Corporation shall, as a condition of receiving the payments mentioned in this article, execute and deliver all of such papers and take all such steps as the Commission may require for the purpose of fully vesting in the Government any rights and benefits the Corporation may have under such obligations or commitments.

- 2) The Government shall treat as allowable costs all expenditures made by the Corporation in accordance with Article IV and not previously so allowed, reimbursed or otherwise credited.

- 3) The Government shall treat as allowable costs such further expenditures made by the Corporation after the date of termination for the protection of Government property and for accounting services in connection with the settlement of this contract as are required or approved by the Commission.

- 4) If the contract is terminated for the convenience of the Government, the Corporation will be paid the full fee for the month of termination plus all accrued payments of fee then unpaid. If the contract is ter-

minated due to fault of the Corporation, no additional payments on account of the fee will be made.

C) Prior to final settlement the Corporation shall furnish a release as required in Article V hereof.

Article IX—Responsibility of Corporation—Contingencies

A) It is the understanding of the parties hereto, and the intention of this contract, that all work under this contract is to be performed at the expense of the Government [fol. 90] and that the Government shall hold the Corporation harmless against any loss, expense (including, but not limited to, expense of litigation), or damage (including, but not limited to, liability to third persons because of death, bodily injury, property injury, destruction, patents, or otherwise) of any kind whatsoever arising out of or in connection with the performance of the work under this contract, except to the extent that such loss, expense, damage or liability is due to the wilful misconduct or bad faith on the part of any of the corporate officers of the Corporation in the performance of the work under this contract.

B) If the performance of any work under this contract is interrupted or prevented by reason of inability to obtain materials or equipment to be used in the performance of this contract, or by reason of labor shortage or labor disputes, from whatever cause arising, and whether or not the demands of the employees involved shall be reasonable and within the Corporation's power to concede, or by reason of fire, explosion, or accident, sabotage or any cause beyond its control, whether of a similar or dissimilar nature, the Corporation shall be excused from performing said work while or to the extent that it is prevented from so doing by one or more of such causes, and all such work shall be performed as soon as practicable after such disability is removed. It is further understood and agreed that the Corporation shall be liable for any failure or delays in the performance of this contract, and accountable for the loss or destruction of or damage to any materials, tools, machinery, equipment, supplies, semi-finished or finished products or other property or materials located or stored

at the Plants or Laboratory or used in connection with the equipment thereof, if, and only if and to the extent that, the same is due to the wilful misconduct or bad faith on the part of any of the corporate officers of the Corporation in the performance of the work under this contract.

C) The Corporation makes no representation or warranty whatsoever, and assumes no responsibility or obligation, that the Plants can be successfully operated (including but not limited to the successful prevention of dangers to person or property which may be involved in such operation of the Plants) but the Corporation shall exert its best efforts successfully to operate the Plants and otherwise to perform the work provided to be performed by it under this contract.

D) Title to all property (including, but not limited to, materials, tools, machinery, apparatus, equipment, supplies, and products) acquired by the Corporation under this contract and payments for which are treated as allowable costs under this contract shall pass directly from the vendor or supplier to the Government and not to the Corporation.

E) The Corporation shall maintain property records with regard to the portion of the Y-12 Plant maintained in standby condition, as well as with regard to Government property furnished or procured under this contract, in such form and manner as the Commission shall prescribe or approve.

[fol. 91] Article X—Inspection and Reports

A) The Corporation recognizes the right of the Commission to inspect in such manner and at such times as it deems appropriate all activities of the Corporation arising in the course of the work under this contract.

B) The Corporation shall make such reports to the Commission with respect to the Corporation's activities under this contract, as the Commission may require from time to time. The Commission will furnish to the Corporation copies of such scientific and technical reports, memoranda and data, developed or prepared elsewhere under sponsorship of the Commission, as the Commission shall deem pertinent to the work under this contract.

Article XI—Changes

A) The Commission may at any time by written order issue additional instructions, require additional work or services or direct the omission of work or services covered by this contract. If such changes cause a material increase or decrease in the amount or character of the work and services to be done under this contract an equitable adjustment of the amount of the fixed fee to be paid the Corporation shall be made and the contract shall be modified in writing accordingly. Any claim for adjustment under this article must be asserted within ten (10) days, or such further time as the Commission may allow, from the date the change is ordered. Any failure of the parties to agree upon an equitable adjustment of the fixed fee shall be deemed a dispute and shall be determined in accordance with the provisions of Article XV hereof. Nothing provided in this article shall excuse the Corporation from proceeding with the prosecution of the work as so changed.

B) The parties recognize that, if the Commission should direct the cessation of operation of any of the production facilities covered by this contract, the Corporation may be required to perform continuing services for a substantial period in connection with recovery of product, orderly discontinuance of operation and preparation for placing such facilities in a standby condition. Accordingly, it is understood and agreed that, in the determination of an equitable adjustment of the fixed fee under such circumstances, the Corporation will be allowed a reasonable fixed fee for any such continuing services which the Corporation may be required to perform following the effective date of such cessation of operation.

Article XII—Employees' Benefit Plan

A) 1) It is recognized that the performance of the work under this contract may subject employees of the Corporation to special hazards of a serious or unusual nature. Accordingly, the Commission agrees that the Corporation shall, with the approval of the Commission, have the right to make payments in accordance [fol. 92] with Section B) of this article, to or on ac-

count of employees, whenever the Corporation shall determine, and such determination has been approved by the Commission, that the employee has died or become disabled as a result of exposure to certain special hazards, to the extent hereinafter in this article provided.

2) As used in this article, the term "special hazards" shall mean those hazards connected with the work under this contract and defined from time to time by mutual agreement in writing between the Commission and the Corporation. Such agreement may be made or modified without the execution of an amendment to this contract.

3) As used in this article, the term "disability" shall mean death, injury or disease resulting from exposure on or after January 18, 1943, to a special hazard in the course of work under this contract.

4) As used in this article, the term "employee" shall mean any person (including borrowed personnel and experts and consultants, with or without fee) employed or utilized by the Corporation or any subcontractor in the performance of work under this contract.

B) 1) Payments in an amount not to exceed Ten Thousand Dollars (\$10,000.00) may be made by the Corporation to or on account of an employee, subject to the approval of the Commission as to the payment and the amount thereof, for the following:

(a) Death—Or a disability resulting in death.

(b) Permanent Disability—For any permanent total or permanent partial disability whenever the Corporation shall determine, and such determination shall have been approved by the Commission, that such permanent disability has substantially impaired the earning or physical capacity of the employee disabled. The Commission may require such waiting period prior to payment as in its judgment may be required to ascertain the extent and permanency of disability.

(c) Temporary Disability—For any temporary total or temporary partial disability (to the extent

not covered by Workmen's Compensation or by payments pursuant to other provisions of this contract) whenever the Corporation shall determine, and such determination shall have been approved by the Commission, that such temporary disability has impaired the earnings of the employee disabled.

(d) Medical Expenses—For medical expenses (to the extent not covered by Workmen's Compensation) [fol. 93] in connection with any temporary or permanent disability sustained by an employee. Unless otherwise authorized or approved by the Commission, payments for medical treatment and care hereunder shall be at reasonable rates not to exceed those prevailing in the locality for comparable medical treatment and care.

2) Aggregate payments under this article to or on account of any employee shall in no event exceed Ten Thousand Dollars (\$10,000.00).

3) Payments under this article shall (except as otherwise provided in subparagraphs B) 1) (c) and B) 1) (d) of this section) be in addition to payments of claims pursuant to Workmen's Compensation or Occupational Disease statutes; provided, that the Commission may require as a condition of payment a release in form and substance satisfactory to the Commission of all other claims by the employee against the Corporation or the Government on account of the disability for which payment under this article is made.

2 C) 1) Payments pursuant to this article may be made by the Corporation during the term of this contract and during a period of ten years (or such longer period as the Commission may approve) following the termination or expiration of work under this contract.

2) Payments made by the Corporation pursuant to this article, together with the Corporation's costs of investigating and handling all cases of asserted disability by employees (whether or not payment is made), shall be treated as allowable costs by the Commission.

3) Whenever disability shall be asserted by an employee, the Corporation may with the approval of the Commission, establish from such available funds as the

Commission may then designate a reserve not to exceed Ten Thousand Dollars (\$10,000.00) with respect to such employee, for payments under this article on account of such disability. Upon the expiration of ten (10) years (or such longer period as the Commission may approve) following the expiration or termination of this contract, or at such earlier time as the amount of the payment to the employee shall be agreed upon by the Commission and the Corporation, the unexpended balance of any such reserve shall be returned to the Government or shall be held and applied as a part of the advances under Article VI, as the Commission may direct.

4) Whenever the Commission and the Corporation shall agree that adequate insurance coverage for disabilities is available, and the Commission shall determine that it is in the best interests of the Government to obtain such insurance, the Corporation will at the request of the Commission obtain such insurance and the Commission will treat as allowable costs all costs, including premiums, incurred by the Corporation in connection therewith. Such insurance shall, to the [fol. 94] extent agreed upon by the Commission and the Corporation, be in lieu of the provisions for payments otherwise specified in this article.

D) Nothing contained in this article shall be construed to grant, vest, or allow any right to be given, to any employee or other third party, or to the legal representative of any of them, insofar as payments by the Corporation or the Government under this article are concerned.

Article XIII—Records and Accounts

A) Records, Books of Account and Auditing

1) The Corporation agrees to keep records and books of account, showing the actual collections and disbursements made in accordance with the provisions of this contract and the actual cost of all items of labor, materials, equipment, supplies, services and other expenditures of whatever nature which are allowable costs

under the provisions of this contract. The system of accounting and auditing to be employed by the Corporation shall be such as is satisfactory to the Commission.

2) Disposition of Records

All sketches, drawings, designs, plans, specifications, technical data, notes, medical records, books of accounts, original supporting documents and other data evidencing costs allowable and revenues received under this contract shall be the property of the Government. All such documents shall be delivered to the Commission or otherwise disposed of by the Corporation either as the Commission may from time to time direct during the progress of the work or in any event as the Commission shall determine upon completion or termination of this contract and final audit of all costs hereunder. All other records in the possession of the Corporation relating to this contract shall be inventoried by the Corporation upon completion or final termination of the contract and shall be preserved by the Corporation for a period of five (5) years after final settlement of the contract unless disposed of from time to time during the progress of the work or upon completion or final termination of the contract in such manner as may be agreed upon in writing by the Commission and the Corporation. Upon expiration of five (5) years after final settlement of the contract, or at any time thereafter, the Corporation shall notify the Commission in writing, prior to destroying or otherwise disposing of any such records, of its intent to destroy or otherwise dispose of the records described in any such notice; whereupon the Commission may direct the Corporation to deliver all or any part of said records to the Commission. The Corporation shall have access at all reasonable times to all such records delivered to the Commission as long as such records are in the custody of the Commission. All costs (including costs [fol. 95] of inventory, storage, servicing, packing, crating, shipping, microfilming or other reproduction as directed by the Commission, and safekeeping in accordance with the Commission's security requirements)

incurred by the Corporation under the requirements of this article shall be allowable costs; provided, however, that prior to final settlement of this contract, the Corporation and the Commission after negotiation may agree upon a definite amount or amounts to be allowed the Corporation for such services in lieu of the actual cost thereof, and the amount or amounts so agreed upon shall be paid to the Corporation by separate voucher or vouchers.

3) Restricting Access to Technical Data, Drawings, Designs and Specifications

Access to all such technical data, notes, drawings, designs and specifications, as well as all technical data, notes, drawings, designs and specifications and other data furnished by the Government to the Corporation, shall be restricted to the trusted and duly authorized representatives of the Government and the Corporation and such other persons as the Commission may authorize.

Article XIV—Special Requirements

A) The Corporation hereby agrees that it will:

1) Procure and thereafter maintain such bonds and insurance in such forms and in such amounts and for such periods of time as the Commission may require.

2) Procure all necessary permits and licenses; obey and abide by all applicable laws, regulations and ordinances and other rules of the United States of America, of the State, territory or subdivision thereof wherein the work is done, or of any other duly constituted public authority.

3) Unless this provision is waived in writing by the Commission, reduce to writing every contract in excess of Two Thousand Dollars (\$2,000.00) made by it for the purpose of the work hereunder for services, materials, supplies, machinery, or equipment, or for the use thereof.

4) Obtain the approval of the Commission prior to

entering into any subcontracts or purchase orders within the following categories:

(a) The subcontracting of any part of the work which the Contractor is obligated to perform under this contract.

(b) The purchase of motor vehicles, typewriters, aircraft, printing equipment, helium or alcohol.

[fol. 96] (c) Any contractual arrangement to be entered into on a cost, cost-plus-a-fixed-fee or time and material basis.

(d) Any subcontract or purchase order involving an expenditure in excess of One Hundred Thousand Dollars (\$100,000.00).

(e) Any subcontract for the performance of construction services or for engineering and design services.

5) Make every reasonable effort in the selection of its employees and in the prosecution of the work under this contract, to safeguard all documents and Government property furnished or produced in connection with the performance of the work and to prevent the theft, loss, damage or unauthorized use of the same. The Commission may require the Corporation to dismiss from work under this contract such employee or employees as the Commission deems incompetent, careless, or insubordinate or whose continued employment is deemed inimical by the Commission to the public interest.

6) Immediately upon termination of third-party rental agreements, make all repairs to equipment rented thereunder which are required to be made by the terms of such rental agreements and remove such equipment from the site of the work.

7) At all times use its best efforts in all acts hereunder to protect and subserve the interest of the Government.

Article XV—Disputes

Except as otherwise provided in this contract, any dispute concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided

by the Contracting Officer, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Corporation. Within 30 days from the date of receipt of such copy, the Corporation may appeal by mailing or otherwise furnishing to the Contracting Officer a written appeal addressed to the Commission, and the decision of the Commission shall, unless determined by a court of competent jurisdiction to have been fraudulent, arbitrary, capricious, or so grossly erroneous as necessarily to imply bad faith, or is not supported by substantial evidence, be final and conclusive: Provided, That if no such appeal to the Commission is taken, the decision of the Contracting Officer shall be final and conclusive. In connection with any appeal proceeding under this clause, the Corporation shall be afforded an opportunity to be heard and to offer evidence in support of its appeal. Pending final decision of a dispute hereunder, the Corporation shall proceed diligently with the performance of the contract and in accordance with the Contracting Officer's decision.

[fol. 97] Article XVI—Convict Labor

In connection with the performance of work under this contract the Corporation shall not employ any person undergoing sentence of imprisonment at hard labor.

Article XVII—Safety and Accident Prevention

The Corporation agrees to conform to all health and safety requirements as may be prescribed by the Commission. The Corporation shall take all reasonable steps and precautions to protect health and minimize danger from all hazards to life and property, and shall make all reports and permit all inspection as provided in such prescribed requirements.

Article XVIII—Officials Not to Benefit

No member of or Delegate to Congress, or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

Article XIX—Covenant Against Contingent Fees

A) *Warranty—Termination or Deduction for Breach.* The Corporation warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Corporation for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or in its discretion to deduct from the contract price or consideration the full amount of such commission, percentage, brokerage or contingent fee.

B) *Subcontracts and Purchase Orders.* Unless otherwise authorized by the Contracting Officer in writing the Corporation shall cause provisions similar to the foregoing to be inserted in all subcontract and purchase orders entered into under this contract.

Article XX—Security

A) *Corporation's Duty to Safeguard Restricted Data and Other Classified Information.* In the performance of the work under this contract the Corporation shall, in accordance with the Commission's security regulations and requirements, safeguard Restricted Data and other classified matter and protect against sabotage, espionage, loss and theft, the classified documents, materials, equipment, processes, etc., as well as such other material of high intrinsic or strategic value as may be in the Corporation's possession in connection with performance of work under this contract.

[fol. 98] B) *Regulations.* The Corporation agrees to conform to all security regulations and requirements of the Commission.

C) *Definition of Restricted Data.* The term "Restricted Data" as used in this article, means all data concerning: (1) design, manufacture, or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the

Restricted Data category pursuant to section 142 of the Atomic Energy Act of 1954.

D) *Security Clearance of Personnel.* Except as the Commission may authorize, in accordance with the Atomic Energy Act of 1954, the Corporation shall not permit any individual to have access to Restricted Data until the designated investigating agency shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual and the Commission shall have determined that permitting such person to have access to Restricted Data will not endanger the common defense and security. As used in this paragraph, the term "designated investigating agency" means the United States Civil Service Commission or the Federal Bureau of Investigation, or both, as determined pursuant to the provisions of the Atomic Energy Act of 1954.

E) *Criminal Liability.* It is understood that disclosure of information relating to the work or services ordered hereunder to any person not entitled to receive it, or failure to safeguard any Restricted Data or any top secret, secret, or confidential matter that may come to the Corporation or any person under the Corporation's control in connection with work under this contract, may subject the Corporation, its agents, employees, and subcontractors to criminal liability under the laws of the United States. (See the Atomic Energy Act of 1954, 68 Stat. 919), (See also Executive Order 10104 of February 1, 1950, 15 F. R. 597.)

F) *Subcontracts and Purchase Orders.* Except as otherwise authorized in writing by the Contracting Officer, the Corporation shall insert provisions similar to the foregoing in all subcontracts and purchase orders under this contract.

Article XXI—Litigation and Claims

A) *Initiation of Litigation.* If the Commission requires the Corporation to initiate litigation, including proceedings before administrative agencies, in connection with this contract, the Corporation shall proceed with the litigation in good faith as directed from time to time by the Commission.

B) *Defense and Settlement of Claims.* The Corporation shall give the Commission immediate notice in writing (1)

of any action including any proceeding before an administrative agency filed against the Corporation arising [fol. 99] out of the performance of this contract; and (2) of any claim against the Corporation the cost and expense of which is allowable under any provision of this contract. Except as otherwise directed by the Commission in writing, the Corporation shall furnish immediately to the Commission copies of all pertinent papers received by the Corporation with respect to such action or claim. To the extent not in conflict with any applicable policy of insurance, the Corporation may with the Commission's approval settle any such action or claim, shall effect at the Commission's request an assignment and subrogation in favor of the Government of all the Corporation's rights and claims (except those against the Government) arising out of any such action or claim against the Corporation, and, if required by the Commission, shall authorize representatives of the Government to settle or defend any such action or claim and to represent the Corporation in, or to take charge of, any such action. If the settlement or defense of an action or claim against the Corporation is undertaken by the Government, the Corporation shall furnish all reasonable assistance in effecting a settlement or asserting a defense. Where an action against the Corporation is not covered by a policy of insurance the Corporation shall with the approval of the Commission proceed with the defense of the action in good faith, and in such event the defense of the action shall be at the expense of the Government.

C) The Government shall either pay directly or discharge completely or treat as allowable costs all payments by the Corporation of final judgments, including assessed costs, entered against the Corporation in such litigation and for the payment of all claims which may be settled by agreement approved by the Commission; provided, however, that no payment shall be made by the Government for any claim, suit or legal proceeding arising out of the wilful misconduct or bad faith on the part of any of the corporate officers of the Corporation in the performance of the work under this contract.

Article XXII—Notice of Labor Disputes

Whenever an actual or potential labor dispute is delaying or threatens to delay the performance of the work the Corporation shall immediately notify the Contracting Officer in writing. Such notice shall include all relevant information concerning the dispute and its background.

Article XXIII—Changes in Personnel

The Corporation shall furnish sufficient technical, supervisory and administrative personnel to insure the prosecution of the work in accordance with approved programs. If in the opinion of the Commission, the Corporation falls behind the program schedule, the Corporation shall take such steps as may be necessary to improve its progress, and the Commission may direct it to increase working days per week, or hours of labor per day. When in the opinion of the Commission the Corporation's personnel and/or over- [fol. 100] head is excessive for the proper performance of this contract, reductions thereof shall be made as required by the Commission. Failure to promptly comply with such directions shall be deemed sufficient cause to terminate this contract for the fault of the Corporation.

Article XXIV—Source and Special Nuclear Materials

The Corporation shall comply with all regulations and instructions of the Commission relative to the control of and accounting for source and special nuclear materials (as these terms are defined in the Atomic Energy Act of 1954). The Corporation will make such reports and permit such inspections as the Commission may require with reference to source and special nuclear materials. The Corporation shall take all reasonable steps and precautions to protect such materials against theft and misappropriation and to minimize all avoidable losses of such materials.

Article XXV—Assignment

Neither this contract nor any interest therein nor claim thereunder shall be assigned or transferred by the Corporation, except as expressly authorized in writing by the Contracting Officer.

Article XXVI—Patents

A) Whenever the Commission or the Corporation determines that an invention or discovery has been made or conceived in the course of any of the work under this contract, the Corporation shall furnish the Commission a brief invention report thereon and shall render such assistance to the Commission as is requested in the course of the Commission's investigation of such invention or discovery; and the Commission shall have the sole power to determine whether or not and where a patent application shall be filed, and to determine the disposition of the title to and rights under any application or patent that may result. The judgment of the Commission on these matters shall be accepted as final; and the Corporation agrees that the inventor or inventors will execute all documents and do all things necessary or proper to carry out the judgment of the Commission.

B) No claim for pecuniary award or compensation under the provisions of the Atomic Energy Acts of 1946 and 1954 shall be asserted by the Corporation with respect to any invention or discovery made or conceived in the course of any of the work under this contract.

C) Except as otherwise authorized in writing by the Commission, the Corporation will obtain patent agreements to effectuate the purposes of Paragraph A of this article and to effect waivers of pecuniary award or compensation under the Atomic Energy Acts of 1946 and 1954 from all persons who perform any part of the work under this contract, except clerical and manual labor personnel who will not have access to technical data.

[fol. 101] D) Except as otherwise authorized in writing by the Commission, the Corporation will insert in all subcontracts provisions making Paragraphs A), B), and C) of this article applicable to the subcontractor and its employees.

E) It is agreed that the Government shall hold the Corporation harmless from liability of any kind arising from infringement of patent rights in the course of the work performed by the Corporation under this contract, in view of the following facts: (a) the Corporation has not made an investigation as to the possibility of patent infringe-

ment, (b) the Government and the Corporation desire to avoid the delay incident to a patent investigation, and (c) the Corporation has not included in its fee any provision for the settlement of possible patent claims. The Corporation shall give prompt notice in writing to the Commission of any action filed or claim against the Corporation for infringement of patent rights in the course of the work performed by the Corporation under this contract. Except as otherwise directed by the Commission in writing, the Corporation shall furnish promptly to the Commission copies of all pertinent papers received by the Corporation with respect to any such action or claim. If required by the Commission, the Corporation (at the Government's expense, by proper arrangement) shall assist the Government in the settlement or defense of such action or claim and shall furnish such evidence in its possession as may be required by the Government in the settlement or defense of such action or claim.

F) The Corporation hereby grants to the Government a perpetual, royalty-free non-exclusive license to practice in any of the plants or laboratories designated in this contract and its supplemental agreements, in their present location or any other locations, and then only for purposes of national defense or for the purposes of the Atomic Energy Acts of 1946 and 1954 and not for the production of commercial products, all patented inventions, secret processes, technical information and know-how of the Corporation which are incorporated in the construction or operation of any of said plants or laboratories by the Corporation. This license shall not extend to any transferee of any of said plants or laboratories or any part thereof, other than a Government agency or operating contractor for the Government, and the Corporation reserves the privilege of asserting any and all legal rights in and to such patented inventions, secret processes, technical information and know-how against any other person, firm or corporation; provided, however, that the provisions of this article shall not supersede or modify any existing agreements between the Corporation and the Government applying to any such inventions, processes, information or know-how.

Article XXVII—Compliance with Federal Laws

In the performance of this contract, the Corporation shall comply with, and give all stipulations and representations required by, applicable Federal laws and shall require such compliances, representations and stipulations with respect to any contract entered into by it with others under this contract as may be required by applicable Federal laws.

[fol. 102] Article XXVIII—Facilities, Services and Materials Furnished By the Government

A) It is the intent of the parties that the Corporation will use certain facilities and other property of the Commission as specifically provided for herein; and that materials, supplies and equipment to be utilized in the work and services hereunder and particularly essential or adapted to the operations provided for hereunder, will be made available therefor mainly if not entirely by the Government. In addition, the Government may also furnish any and all other facilities, services, materials, supplies and equipment required in connection with the work and services under this contract after due consultation with the Corporation, to assure efficiency of operation, advantageous procurement and non-duplication of effort for items of materials, services, supplies or equipment.

B) Title to all Government-owned property in the care, custody or possession of the Corporation in connection with the performance of this contract shall remain vested in the Government throughout the term hereof, except for such as may be transferred or disposed of in accordance with this contract; and upon the completion or termination of this contract, the Corporation shall return care, custody and possession of all of the same not so transferred or disposed of or consumed, to the Government.

Article XXIX—State and Local Government Taxes, Fees and Charges

A) The Corporation agrees to notify the Commission of any State or local tax, fee or charge levied or purported to be levied on or collected from the Corporation with respect to the contract work or any transaction thereunder and constituting an allowable item of cost if due and pay-

able, but which, in the opinion of the Corporation or under the position of the Commission as communicated to the Corporation is inapplicable or invalid; and the Corporation further agrees to refrain from paying any such tax, fee, or charge unless authorized by the Commission. Any State or local tax, fee or charge paid with the approval of the Commission or on the basis of advice from the Commission that such tax, fee or charge is applicable and valid, and which would otherwise be an allowable item of cost, shall not be disallowed as an item of cost by reason of any subsequent ruling of determination that such tax, fee or charge was in fact inapplicable or invalid.

B) The Corporation agrees to take such action as may be required or approved by the Commission to cause any such tax, fee or charge referred to above to be paid under protest, and to take such actions as may be required or approved by the Commission to seek recovery of any payment made, including assignment to the Government or its designee of all rights to an abatement or refund thereof, and granting permission for the Government to join with the Corporation in any proceedings for the recovery thereof or to sue for recovery in the name of the Corporation. If the Commission directs the Corporation to institute litigation to enjoin the collection of or to recover payment of any such tax, fee or charge referred to above, or, if a claim or suit is filed against the Corporation for a tax, fee, or charge [fol. 103] it has refrained from paying in accordance with this article, the procedures and requirements of Article XXI, "Litigation and Claims," shall apply, and the costs and expenses incurred by the Corporation shall be allowable items of cost, as provided in this contract, together with the amount of any judgment rendered against the Corporation.

C) The Government shall save the Corporation harmless from penalties and interest incurred through compliance with this article.

Article XXX—Guard and Fire-Fighting Forces

During the performance of any and all phases of the work under this contract, the Corporation shall maintain guard and fire-fighting forces to the extent approved by the Commission. In the interests of maintaining the efficiency

and morale of the guard force, the Corporation shall, subject in each instance to the approval in writing of the Commission, provide legal counsel and pay all reasonable and incidental costs (including the premium for bail bond) which may be necessary to defend adequately any member of said guard force against whom a civil or criminal action is brought, where such action is based upon an act or acts of the guard, undertaken by him in good faith, for the purpose of accomplishing and fulfilling the official duties of his employment.

Article XXXI—Disposal of Property

It is recognized that property (including without limitation machine tool and processing equipment, manufacturing aids, raw, manufactured, scrap and waste materials), title to which is or may hereafter become vested in the Government, will be used by or will be in the care, custody or possession of the Corporation in connection with the performance of this contract. With the approval in writing of the Commission (whether such approval is given prior to or after the giving of a notice of the termination of this contract for the convenience of the Government), the Corporation may transfer or otherwise dispose of such Government-owned property to such parties and upon such terms and conditions as the Commission may approve or ratify, or, with like approval by the Commission, the Corporation may itself acquire title to such property, or any of it, at a price mutually agreeable. The proceeds of any such transfer or disposition shall be received for the account of the Government, and shall be received, held, and utilized as a part of the advances of Government funds pursuant to Article VI; provided that, where property is transferred to the Corporation, by agreement of the parties, the agreed price may be paid by credit against fee payments due the Corporation hereunder.

Article XXXII—Walsh-Healey Public Contracts Act

To the extent that this contract is subject to the Walsh-Healey Public Contracts Act, as amended (41 U. S. Code 35-45), there are hereby incorporated by reference the representations and stipulations required by said Act and

regulations issued thereunder by the Secretary of Labor, such representations and stipulations being subject to all applicable rulings and interpretations of the Secretary of Labor which are now or may hereafter be in effect.

[fol. 104] Article XXXIII—Nondiscrimination in Employment

A) In connection with the performance of work under this contract, the Corporation agrees not to discriminate against any employee or applicant for employment because of race, religion, color or national origin. The aforesaid provision shall include but not be limited to, the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Corporation agrees to post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of the nondiscrimination clause.

B) The Corporation further agrees to insert the foregoing provision in all subcontracts hereunder, except (i) subcontracts for standard commercial supplies or raw materials, (ii) subcontracts to be performed outside the United States where no recruitment of workers within the limits of the United States is involved, (iii) purchase orders on pocket-size forms similar to U. S. Standard Form 44, and (iv) subcontracts to meet other special requirements or emergencies, if recommended by the Committee on Government Contracts. In the case of purchase orders hereunder which do not exceed \$5,000, the last sentence of paragraph A) above may be omitted.

Article XXXIV—Renegotiation

If this contract is subject to the Renegotiation Act of 1951, as amended, the following provisions shall apply:

A) This contract is subject to the Renegotiation Act of 1951, as amended (Act of August 3, 1955, P. L. 216, 84th Congress) and shall be deemed to contain all the provisions required by Section 104 of said Act.

B) The Corporation agrees to insert the provisions of

this article, including this paragraph B), in all subcontracts specified in Section 103(g) of the Renegotiation Act of 1951; provided that the Corporation shall not be required to insert the provisions of this article in any subcontract exempted by or pursuant to Section 106 of the Renegotiation Act of 1951, as amended.

Article XXXV—Examination of Records

A) The Corporation agrees that the Comptroller General of the United States or any of his duly authorized representatives shall have access to, and the right to examine any directly pertinent books, documents, papers, and records of the Corporation involving transactions related to this contract until the expiration of three years after final payment under this contract unless the Commission authorizes their prior disposition.

[fol. 105] B) The Corporation further agrees to include in all subcontracts hereunder a provision to the effect that the subcontractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor involving transactions related to the subcontract until the expiration of three years after final payment under the subcontract unless the Commission authorizes their prior disposition. The term "subcontract" as used herein means any purchase order or agreement to perform all or any part of the work or to make or furnish any materials required for the performance of this contract, but does not include (1) purchase orders not exceeding \$1,000, (2) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public, or (3) subcontracts or purchase orders for general inventory items not specifically identifiable with the work under this contract.

C) Nothing in this contract shall be deemed to preclude an audit by the General Accounting Office of any transaction under this contract.

D) Except where specifically waived by the Commission, the Corporation agrees to include in all negotiated subcontracts hereunder (including lump-sum or unit price subcontracts) which provide that costs incurred thereunder

by the subcontractor are a factor in any future price determination or redetermination, provisions whereby the subcontractor agrees (1) to maintain accounts in conformity with generally accepted accounting principles conducive to the determination of the cost of the work under the subcontract and (2) to afford the Commission and/or the Corporation or any of their duly authorized representatives, until the expiration of three years after final payment under the subcontract, access to and the right to examine any directly pertinent books, documents, papers and records of the subcontractor involving transactions related to such subcontract.

E) It is understood that payments to subcontractors under cost-type subcontracts, or by the operation of negotiated subcontract provisions for price determination or redetermination in which costs are a factor, shall be audited by the Corporation (and such audit shall be subject to review by the Commission), except where the Commission, upon the recommendation of the Corporation, elects to waive such audit or to conduct the audit with Commission personnel or make other arrangements for the conduct of the audit (in either of which events the results of such audit shall be made available to the Corporation).

Article XXXVI—Eight-Hour Law

No laborer or mechanic doing any part of the work contemplated by this contract, in the employ of the Corporation or any subcontractor contracting for any part of said [fol. 106] work contemplated, shall be required or permitted to work more than eight hours in any one calendar day upon such work, except upon the condition that compensation is paid to such laborer or mechanic in accordance with the provisions of this article. The wages of every laborer and mechanic employed by the Corporation or any subcontractor engaged in the performance of this contract shall be computed on a basic day rate of eight hours per day and work in excess of eight hours per day is permitted only upon the condition that every such laborer and mechanic shall be compensated for all hours worked in excess of eight hours per day at not less than one and one-half times the basic rate of pay. For each violation of the requirements of this article a penalty of five dollars shall be imposed for each

laborer or mechanic for every calendar day in which said employee is required or permitted to labor more than eight hours upon said work without receiving compensation computed in accordance with this article, and all penalties thus imposed shall be withheld for the use and benefit of the Government: *Provided*, That this stipulation shall be subject in all respects to the exceptions and provisions of the Eight-Hour Laws as set forth in 40 U.S.C. 321, 324, 325, 325a and 326, which relate to hours of labor and compensation for overtime.

Article XXXVII—Buy American Act

The Corporation agrees that in the performance of the work under this contract the Corporation, subcontractors, material men and suppliers shall use only such unmanufactured articles, materials and supplies (which term "articles, materials and supplies" is hereinafter referred to in this clause as "supplies") as have been mined or produced in the United States, and only such manufactured supplies as have been manufactured in the United States substantially all from supplies mined, produced, or manufactured, as the case may be, in the United States. The foregoing provisions shall not apply (i) with respect to supplies exempted by the Commission from the application of the Buy American Act (41 U.S.C. 10a-d), (ii) with respect to supplies for use outside the United States, or (iii) with respect to the supplies to be used in the performance of work under this contract which are of a class or kind determined by the Commission not to be mined, produced or manufactured, as the case may be, in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality, or (iv) with respect to such supplies, from which the supplies to be used in the performance of work under this contract are manufactured as are of a class or kind determined by the Commission not to be mined, produced, or manufactured as the case may be, in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality, provided that this exception (iv) shall not permit the use in the performance of work under this contract of supplies manufactured outside the United States if such supplies are manufactured in the United States in sufficient and

reasonably available commercial quantities and of a satisfactory quality.

[fol. 107] Article XXXVIII—State Unemployment Compensation Contributions

A) It is recognized that, as a direct result of the merger of Carbide and Carbon Chemicals Corporation into Union Carbide and Carbon Corporation on December 31, 1949, and the employment since that date of persons required for the performance of this contract, the contributions under the Tennessee and Kentucky unemployment compensation laws paid or to be paid hereafter by the Corporation in respect of its employees pursuant to said laws may be greater or less than the amount that the Corporation would have been required to pay under said laws had the work under this contract not been undertaken by the Corporation. Accordingly, it is agreed that, as soon as practicable after the date of execution of Modification No. 37, the parties shall compute and mutually agree upon the amounts representing the net saving or expense to the Corporation under each of said laws during the period from January 1, 1950, through December 31, 1954, representing the net amounts by which the contributions by the Corporation under each of said laws during such period have been greater or less than the amounts the Corporation would have been required to pay had the work under this contract not been performed. If such computation and agreement show a net saving under either law or net savings under both laws accrued to the Corporation, such saving or savings shall be considered a credit or credits to the Government for the purposes hereinafter provided (such credit or credits being hereinafter referred to as "Government Tennessee credit" and/or "Government Kentucky credit", as applicable). Conversely, if such computation and agreement show a net expense under either law or net expenses under both laws to the Corporation, the amount or amounts of such expense or expenses shall be considered a credit or credits to the Corporation for the purposes hereinafter provided (such credit or credits being hereinafter referred to as "Corporation Tennessee credit" and/or "Corporation Kentucky credit", as applicable).

B) For the period beginning January 1, 1955 and ending

five (5) years following the expiration or total termination of this contract:

1) The Corporation will be compensated, as allowable costs under this contract, for the amounts, if any, that the contributions paid by it under the Tennessee and Kentucky unemployment compensation laws during such period in respect of employees in its regular business (which term for the purpose of this agreement shall mean all business conducted by the Corporation, its subsidiaries or affiliated corporations under common control other than the work performed under this contract) are greater than the contributions the Corporation would have been required to pay except for the performance of this contract. Provided, however, that the Corporation shall receive no such compensation in respect to either law until the total payments due under this paragraph 1) in respect to that law less payments due to the Government under paragraph 2), below, in [fol. 108] respect to that law exceed the amount of any "Government Tennessee credit" or "Government Kentucky credit", as applicable.

2) The Corporation will pay to the Government or, by mutual agreement, will credit against any fee payments due to the Corporation under this contract the amounts, if any, that the contributions paid by it under the Tennessee and Kentucky unemployment compensation laws during such period in respect of employees in its regular business are less than the contributions the Corporation would have been required to pay except for the performance of this contract. Provided, however, that no such payments or credits to the Government in respect to either law shall be due until the aggregate amount payable to the Government under this paragraph 2) in respect to that law less the aggregate amount payable to the Corporation under paragraph 1) above, in respect to that law exceeds the amount of any "Corporation Tennessee credit" or "Corporation Kentucky credit", as applicable.

3) The "Government Tennessee credit" and "Corporation Tennessee credit" shall be used only for the purpose of reducing amounts payable by either party in respect to the Tennessee Employment Security Act

under the provisions of paragraphs 1) and 2), above, and the "Government Kentucky credit" and "Corporation Kentucky credit" shall be used only for the purpose of reducing amounts payable by either party in respect to the Kentucky Unemployment Compensation Act under the provisions of paragraphs 1) and 2), above. To the extent that these credits are not applied to the reduction of such payments, there shall be no obligation on the part of either party to pay to the other party the balance of any such credit.

C) 1) The initial computation of payments due under Sections B) 1) and B) 2), above, in respect to the Tennessee Employment Security Act shall be made as soon as practicable after June 30, 1955, for the period January 1, 1955 through June 30, 1955. Thereafter, computations shall be made as soon as practicable after each June 30, for the annual period then expiring. As used in this Section C), "adjustment period" means January 1, 1955-June 30, 1955, and thereafter a twelve (12) month period ending on June 30 of each calendar year.

2) In order to determine the applicability in respect to the Tennessee Employment Security Act of Section B) 1) or Section B) 2), above, the following formulas shall be employed: (I) to determine the reserve ratio of the Corporation under the Tennessee Employment Security Act for its entire operations (regular business and performance of this contract) for each adjustment period; and (II) to determine the reserve ratio of the Corporation under the Tennessee Employment Security Act in its regular business for each adjustment period:

[fol. 109] \

$$(I) \quad TC - TB$$

TR

$$(II) \quad \frac{(TC - TB) - (TC_c + MP_T - MR_T - TB_c)}{(TP - TP_c)}$$

3) The letters appearing in the above formulas are defined as follows:

TC—Total contributions made by Corporation under the Tennessee Employment Security Act for

all employees including employees under this contract through the January 31st following each adjustment period and based upon wages paid through the December 31st preceding each adjustment period.

TB—Total benefits charged to Corporation under the Tennessee Employment Security Act for all employees including employees under this contract through the December 31st preceding each adjustment period.

TP—Total taxable payroll of Corporation for all employees covered by the Tennessee Employment Security Act including employees under this contract during the calendar year prior to each adjustment period.

TC—Total contributions made by Corporation under the Tennessee Employment Security Act on account of its total taxable payroll for employees under this contract through the January 31st following each adjustment period and based upon wages paid through the December 31st preceding each adjustment period.

TB—Total benefits charged to Corporation under the Tennessee Employment Security Act on account of employees under this contract through the December 31st preceding each adjustment period.

TP—Total taxable payroll for employees under this contract covered by the Tennessee Employment Security Act during the calendar year prior to each adjustment period.

MP—Total prior payments in respect to the Tennessee Employment Security Act made to the Corporation under Section B) 1), above.

MR—Total prior payments in respect to the Tennessee Employment Security Act made by the Corporation under Section B) 2), above.

4) Upon determining the reserve ratio applicable in Section C) paragraph 2) (I and II), above, in accord- [fol. 110] ance with the pertinent formula, such ratio shall then be converted in accordance with the current table of the Tennessee Employment Security Act, as amended, to the applicable rate of contribution which would be paid in the case of each reserve ratio. There-

upon the resulting difference in rates of contribution, if any, shall be applied to the taxable payroll of the Corporation in its regular business during the adjustment period and the monetary sum thus determined shall be paid in accordance with either Section B) 1) or B) 2), above, as applicable.

D) 1) The initial computation of payments in respect to the Kentucky Unemployment Compensation Act due under Section B) 1) and B) 2), above, shall be made as soon as practicable after December 31, 1955 for the period January 1, 1955 through December 31, 1955. Thereafter computations shall be made as soon as practicable after each January 1 for the annual period then expiring. As used in this Section D), "adjustment period" means January 1, 1955 through December 31, 1955, and thereafter a twelve (12) month period ending on December 31 of each calendar year.

2) In order to determine the applicability in respect to the Kentucky Unemployment Compensation Act of Section B) 1) or B) 2), above, the following formula shall be employed to determine for each adjustment period the balance of the reserve account of the Corporation under the Kentucky Unemployment Compensation Act for its regular business:

$$B - (TC_{EK} + MP_K - MR_K - TB_{EK})$$

3) The letters appearing in the above formula are defined as follows:

B—The balance in the employer's reserve account actually used for the computation of the Kentucky unemployment compensation tax during the adjustment period.

TC_{EK} —Total contributions made by the Corporation under the Kentucky Unemployment Compensation Act on account of its total taxable payroll under this contract up to the computation date (as defined in the Kentucky Unemployment Compensation Law) preceding the beginning of each adjustment period.

TB_{EK} —Total benefits charged to the Corporation under the Kentucky Unemployment Compensation Act on account of employees under this contract up

to the computation date (as defined in the Kentucky Unemployment Compensation Law) preceding the beginning of each adjustment period.

[fol. 111] MP_K—Total prior payments in respect to the Kentucky Unemployment Compensation Act made to the Corporation under Section B) 1), above.

MP_K—Total prior payments in respect to the Kentucky Unemployment Compensation Act made by the Corporation under Section B) 2), above.

4) Upon determining the reserve account balance in accordance with the above formula, such reserve account balance shall then be converted in accordance with the current applicable section or sections of the Kentucky Unemployment Compensation Act as amended to the applicable rate of contribution which would be paid in case of such reserve account balance. Thereupon the difference, if any, between the rate so found and the rate actually imposed during the adjustment period shall be applied to the taxable payroll of the Corporation covered by the Kentucky Unemployment Compensation Act in its regular business during the adjustment period and the monetary sum thus determined shall be paid in accordance with either Section B) 1) or B) 2), above, as applicable.

E) During the term of this contract, and until the expiration of the period provided for in Section B) above, it is further agreed that:

In the event any portion or all of the Corporation's experience rating account under the Tennessee Employment Security Act or of the Corporation's reserve account under the Kentucky Unemployment Compensation Act is transferred to any successor employer or successor employers not engaged in the performance of the work under this contract or the same work under another contract with the Commission, the Corporation and the Government shall negotiate to agree upon an equitable adjustment of the obligations of the Corporation and the Government under this article, and to agree upon the benefit, if any, which such successor employer or employers may realize by reason of the

Government's contributions in the account, so transferred; provided, that none of the Government's contributions in the Corporation's account shall be transferred without the express written approval of the Commission. Any benefit agreed upon as attributable to any such transfer shall be paid over or credited to the Government as the Commission may direct. In the event the parties are unable to agree upon an equitable adjustment of the obligations of the parties under this article, the benefit inuring to any successor employer or employers by reason of the inclusion of all or part of the Government's contributions, such disagreement shall be deemed a dispute covered under the provisions of Article XV—Disputes.

[fol. 112] Article XXXIX—Definitions.

As used in this contract:

A) the term "Contracting Officer" means the person executing this contract on behalf of the Government and includes his successors or any duly authorized representative of any such person.

B) the term "Commission" means the United States Atomic Energy Commission or any duly authorized representative thereof, including the Contracting Officer except for the purpose of deciding an appeal under the article entitled "Disputes".

C) the term "Plants" shall be deemed to include all of the plants referred to in Article I of this contract and the Oak Ridge National Laboratory.

In Witness Whereof, the parties hereto have executed this Supplemental Agreement the day and year first above written.

The United States of America, By: U. S. Atomic Energy Commission, By: S. K. Sapirie, Contracting Officer. Union Carbide and Carbon Corporation, By: Kenneth Rush, Vice President.

Witnesses:

Elizabeth C. Stocker, 30 East 42nd St., N.Y.C. Caryl K. Eetzer, 30 East 42nd Street, New York, N.Y.

[fol. 77] EXCERPT FROM EXHIBIT "F-1"

Contract No. AT-(40-1)-2014

This Contract, entered into the 17th day of February, 1956, effective as of the 12th day of August, 1955, between the United States of America (hereinafter called the "Government"), acting through the United States Atomic Energy Commission (hereinafter called the "Commission"), and The H. K. Ferguson Company, a corporation organized and existing under the laws of the State of Ohio (hereinafter called the "Contractor");

Witnesseth That:

Whereas, the Commission finds that the common defense and security require the construction of certain facilities, hereinafter more particularly described, and that the urgency of completion of these facilities does not permit the completion of plans and specifications, necessary for competitive bidding on a fixed-price basis, prior to the scheduled commencement of construction; and

Whereas, the Contractor is willing to undertake the performance of such construction work on a cost-plus-a-fixed-fee basis; and

Whereas, the Commission finds that the Contractor is best qualified to perform the work, all relevant factors considered; and

Whereas, the Commission certifies that this negotiated contract is authorized by and executed under the Atomic Energy Act of 1954 in the interest of the common defense and security;

Now, Therefore, the parties hereto agree as follows:

Article I—Definitions

1. The term "Contracting Officer" means the person executing this contract on behalf of the Government and includes his successors or any duly authorized representative of any such person.

2. The term, "Commission" means the United States Atomic Energy Commission or any duly authorized representative thereof, including the Contracting Officer except for the purpose of deciding an appeal under the article entitled "Disputes".

Article II—Statement of Work

1. *Scope.* Under the general direction of the Contracting Officer the Contractor shall furnish the materials, equipment, and services (except such as are furnished by the Government) necessary or required by the Commission in connection with certain miscellaneous construction projects to be located in the Commission's Oak Ridge, Tennessee Area. Said construction work will consist in part of new construction, but will be chiefly alterations to a wide range of existing facilities, including, but not limited to, changes and additions to process systems, electrical systems, service systems, utility and building structures, installation of equipment and machinery in existing facilities, stripping of existing buildings, modification of laboratories, and other similar miscellaneous work. The construction work will be located generally in operating areas where construction must be accomplished under a very precise scheduling and with a minimum of interference with operations. The total scope [fol. 78] of the work cannot presently be defined. From time to time written directives will be issued to the Contractor by the Commission under this contract, authorizing the performance of specific items of work of the general type described above which the Commission has determined must be performed under a cost-plus-a-fixed-fee type construction contract. Said directives will contain a general description of the construction work authorized thereby. Unless otherwise provided therein, the work described in such directives shall be started immediately, prosecuted diligently, and completed in the shortest practicable time. In the event that any such directive does not contain a mutually agreed upon estimate of the cost of performing the work authorized thereby (exclusive of the Contractor's fixed-fee therefor), it is understood and agreed that, as promptly as possible following the issuance of such directive the Commission and the Contractor will negotiate to agree in writing upon a reasonable estimate of the cost of said work (exclusive of the Contractor's fixed-fee therefor). It is the Commission's policy to perform as much as possible of its construction work on a fixed price (lump-sum or unit-price) basis. The work to be performed hereunder will be such as the Commission, in its discretion, determines to be unsuited for performance on a fixed price basis. During

the period of this contract the Contractor will not be permitted to participate in fixed price construction work in the Oak Ridge Area. The Commission reserves the right to award to others under other cost-plus-a-fixed-fee contracts any project which may arise during the period of this contract which, in the opinion of the Commission, may best be so handled in the interest of the Government.

It is contemplated that at intervals not less frequent than every six months the Commission and the Contractor will undertake in good faith to negotiate, arrive at, and execute a definitive supplemental agreement to this contract covering the work authorized under then currently outstanding written directives of the type referred to in the preceding paragraph. Said supplemental agreement will include a description of the work to be performed, the estimated cost of said work as previously agreed to by the parties in accordance with the preceding paragraph, and an equitable fixed-fee (which shall be based on said cost estimates) to be paid to the Contractor therefor. A failure to agree upon the estimate cost of any work authorized by a directive before 50% of said work has been completed, or to agree upon the description of said work or the fee to be paid to the Contractor therefor shall be deemed to be a dispute within the meaning of the Article entitled "Disputes".

Article III—Changes

1. *Changes and Adjustment of Fee.* The Contracting Officer may at any time and without notice to the sureties, if any, issue written directions requiring additional work within the general scope of any construction project which has been specifically authorized under Article II, paragraph 1, or directing the omission of or variation in such work. If any such direction results in a material change in the amount or character of the work authorized, an equitable adjustment of the fixed fee shall be made in accordance with the agreement of the parties and the contract shall be [fol. 79] modified in writing accordingly. Any claim by the Contractor for an adjustment under this Article must be asserted in writing within 30 days from the date of receipt by the Contractor of the notification of change unless the Contracting Officer grants a further period of time. A failure to agree on an equitable adjustment under this

article shall be deemed to be a dispute within the meaning of the Article entitled "Disputes".

2. *Work to Continue.* Nothing contained in this Article shall excuse the Contractor from proceeding with the prosecution of the work in accordance with the requirements of any direction hereunder.

Article IV—Estimates, Obligation of Funds, and Fixed Fee

1. *Initial Obligation of Funds.* The Commission has obligated for the performance of work hereunder \$1,000,000.00.

2. *Revised Estimates of Cost and Obligation of Funds.* The Contracting Officer may by written notice to the Contractor revise (i) any initial estimate of cost of the work (exclusive of the fixed fee) which may hereafter be established under a supplemental agreement hereunder; or (ii) the amount of funds obligated hereunder, and may, from time to time, further revise any revised estimate of cost or obligation of funds.

3. *Estimate of Time for Completion.* It is presently estimated that the work will be completed by August 15, 1958.

4. *Limit on Total Amount of Allowable Costs.* Payments on account of costs shall not in the aggregate at any time exceed the amount of funds currently obligated hereunder less the Contractor's fixed fee when such fee has been agreed upon.

5. *Notice of Costs Approaching Funds Obligated—Contractor Excused Pending Increase When Obligation Reached.* The Contractor shall notify the Contracting Officer in writing when the aggregate of expenditures and outstanding commitments allowable under this contract is equal to 90% (or such lesser percentage as the Contracting Officer may from time to time establish by notice to the Contractor) of the amount of funds currently obligated hereunder. When such expenditures and outstanding commitments equal 100% of such amount, less the Contractor's fixed fee, the Contractor shall make no further expenditures (except to meet existing commitments) or commitments, and shall be excused from further performance of the work unless and until the Contracting Officer thereafter shall increase the amount of funds obligated hereunder.

6. *Government's Right to Terminate not Affected.* The

giving of any notice by either party under this Article shall not be construed to waive or impair any right of the Government to terminate the contract under the provisions of the Article entitled "Termination".

7. *Cost Information.* The Contractor shall maintain current cost information adequate to reflect the cost of performing the work under this contract at all times while the work is in progress, and shall prepare and furnish to the Government such written estimates of cost and information in support thereof as the Contracting Officer may request.

[fol. 80] 8. *Correctness of Estimates not Guaranteed.* It is understood that neither the Government nor the Contractor guarantees the correctness of any estimate of cost or estimate of time for performance of the work under this contract, and that there shall be no adjustment in the amount of the Contractor's fixed fee by reason of errors in the computation of estimates or differences between such estimates and the actual cost or time for performance of the work.

Article V—Consideration

Compensation for Contractor's Services. Payment for allowable costs and of the fixed fee as hereinafter provided, shall constitute complete compensation for the Contractor's services including profit and all items or kinds of expenses not allowable under the terms of this contract.

Article VI—Costs and Expenses

1. *Basis for Determination of Allowable Costs.* The costs allowable under this contract shall be costs and expenses which are actually incurred by the Contractor in performing the work under this contract and which are necessary or incident thereto. Allowable costs shall include, without limitation on the generality of the foregoing, the items described as allowable in paragraph 2, but shall not in any event include the items described as unallowable in paragraph 3, except to the extent indicated therein. Failure to mention any item of cost in this article is not intended to imply that it is either allowable or unallowable.

2. *Examples of Allowable Costs.* The following are ex-

amples of items of cost which are allowable under this contract to the extent indicated:

a. Bonds and insurance, including self-insurance, approved by the Contracting Officer.

b. Camp operations, to the extent approved by the Contracting Officer.

c. Materials, supplies and equipment, including freight, transportation, material handling, inspection, storage, salvage, and other usual expenses incident to the procurement and use thereof, subject to approvals required under any other provisions of this contract.

d. Patents, purchased designs, and royalty payments to the extent approved by the Contracting Officer.

e. Rental for (1) construction plant and equipment rented by the Contractor from others at rates and under written agreements approved by the Contracting Officer, and (2) construction plant and equipment owned and furnished by the Contractor under Appendix "B" to this contract.

f. Maintenance, inspection, repair, replacement, and transportation of construction plant and equipment, to the extent not covered by rentals or insurance and as provided in rental agreements approved by the Contracting Officer or in Appendix "B".

[fol. 81] g. Repair and replacement of Government-owned property and the restoration and clean-up of site and facilities, to the extent directed and approved by the Contracting Officer.

h. Structures and facilities of a temporary nature and temporary use of land and structures.

i. Subcontracts approved by the Contracting Officer.

j. Taxes, fees, and charges levied by public agencies which the Contractor is required by law to pay, except those which are imposed upon or arise by reason of or are measured by the Contractor's fee, or are excluded by other provisions of this contract.

k. Utility services, such as communication, power, gas, and water, subject to approvals required under any other provisions of this contract.

l. In accordance with Appendix "A" or amendments thereto, labor (whether as wages, salaries, bene-

fits, or other compensation), recruiting of personnel (including "help-wanted" advertising), travel (including subsistence during travel), and the transportation of personal household goods and effects.

m. Expenses of litigation, including reasonable counsel fees, incurred in accordance with the Article of this contract entitled "Litigation and Claims", and, as approved by the Contracting Officer, such other legal, accounting, and consulting fees as are not expressly excluded by other provisions of this contract.

n. Losses and expenses (including settlements made with the consent of the Contracting Officer) sustained by the Contractor in the performance of the work and certified in writing by the Contracting Officer to be just and reasonable, except losses and expenses expressly made unallowable under other provisions of this contract, or compensated for by insurance or otherwise, or which would have been compensated for by insurance required by law or by written direction of the Contracting Officer.

o. Expert technical and professional assistance, to the extent approved by the Contracting Officer.

p. Items of cost which are not expressly excluded by other provisions of this contract and which are specifically certified in writing by the Contracting Officer as allowable hereunder.

3. *Examples of Unallowable Costs.* The following are examples of items of cost which are not allowable except as indicated:

a. Advertising, except "help-wanted" advertising or as otherwise authorized by the Contracting Officer.

[fol. 82] b. Central and branch office expenses of the Contractor, except as authorized by the Contracting Officer.

c. Commissions and bonuses (under whatever name) in connection with obtaining or negotiating for a Government contract.

d. Unless otherwise authorized by the Contracting Officer, costs of the character described in paragraph

2. 1, which are not in accordance with Appendix "A" or amendments thereto.

e. Provision for contingency reserves.
 f. Contributions and donations.
 g. Dividend provisions or payments.
 h. Entertainment expense, except such recreational activities for on-site employees as may be authorized by the Contracting Officer or Appendix "A" or amendments thereto.

i. Fines and penalties, including interest, unless incurred at the express direction of the Contracting Officer or in conformity with the Article of this contract entitled "State and Local Taxes."

j. Interest on borrowings (however represented), bond discount and expense, and financing charges.

k. Losses from investments, sales, exchanges or abandonment of capital assets, and losses on other contracts.

l. Membership in trade, business, and professional organizations.

m. Pension, retirement, group health, accident, and life insurance plans, except to the extent authorized under Appendix "A" or amendments to Appendix "A".

n. Storage of contract records after completion of contract operations, irrespective of contractual or statutory requirements regarding the preservation of records.

o. Taxes, fees, and charges levied by public agencies which are imposed upon or arise by reason of or are measured by the Contractor's fixed fee.

p. Government-furnished property, except to the extent that cash payment therefor is required pursuant to procedures of the Commission applicable to transfers of such property to the Contractor from others.

[fol. 83] q. Bad debts, including expenses of collection and provisions for bad debts, arising out of other business of the Contractor.

r. Legal, accounting and consulting services, and related expenses, incurred in connection with organization, reorganization, prosecution of patent infringement litigation, prosecution or defense of anti-trust

suits, prosecution of claims against the United States, and contesting actions or proposed actions of the United States.

s. Premiums for overtime, shift or holiday work, except to the extent such work is authorized by the Contracting Officer or Appendix "A" or amendments thereto.

t. Premiums for insurance on the lives of any persons, where the Contractor is the beneficiary directly or indirectly.

u. Travel expenses of the Contractor's officers, proprietors, executives, administrative heads and other employees of the Contractor's central office or branch-office organizations concerned with the general management, supervision and conduct of the Contractor's business as a whole, except to the extent that particular travel is in connection with the contract and approved by the Contracting Officer.

v. Other items made unallowable by other provisions of this contract.

Article VII—Payments and Advances

1. *Installments of Fixed Fee.* Ninety per cent (90%) of the fixed fee shall become due and payable in monthly installments in amounts based on the proportion of the work then completed, as determined by the Contracting Officer; and the balance upon completion and acceptance of all work under this contract; provided, however, that at any time after the amount of the fixed fee withheld by the Government pursuant to the preceding clause equals \$15,000.00, and so long as the Contractor's progress on the unfinished balance of the work is satisfactory to the Contracting Officer, the Government may, in the discretion of the Contracting Officer, with respect to any future fee installments, pay to the Contractor one hundred per cent (100%) of such future fee installments.

2. *Advances for Allowable Costs.* It is the intent of the parties that, except as the Contractor and the Contracting Officer may otherwise mutually agree in writing, the Contractor shall not utilize its own funds in making payments for costs allowable under this contract. Accordingly the Government shall advance to the Contractor

tor from time to time, as in the opinion of the Commission the Contractor's need therefor develops, Government funds in amounts sufficient to enable the Contractor to continue to make payments for costs allowable under this contract.

[fol. 84] 3. *Provisions Applicable to Advances.* In connection with advances of Government funds the following provisions shall apply:

a. *Special Bank Account—Use.* Until liquidated as provided herein, any advance or any revenues received by the Contractor in connection with the work under this contract, other than the Contractor's fixed fee or fees, if any, shall be deposited at a bank or banks satisfactory to the Contracting Officer in a special account separate from all other funds and so designated as to indicate clearly to the bank its special character and purpose. Funds advanced hereunder and the balances of any such bank account shall be drawn on by the Contractor solely for the purpose of making payments for costs allowable under this contract or other payments specifically approved in writing by the Contracting Officer. If the Contracting Officer shall at any time determine that the balance in such bank account exceeds the Contractor's current needs, the Contractor shall make such disposition of the excess as the Contracting Officer may direct.

b. *Title—Rights and Liabilities of Bank.* Title to the unexpended balance of any funds advanced and of any bank account established pursuant to this Article shall remain in the Government and be superior to any claim or lien of the bank of deposit or others. It is understood that an advance to the Contractor hereunder is not a loan to the Contractor and will not require the payment of interest by the Contractor, and that the Contractor acquires no right, title, or interest in or to such advance other than the right to make expenditures therefrom as provided in this Article. The bank of deposit shall act with respect to such account in accordance with any written directions of the Contracting Officer, and shall not be liable to any party to this contract for any action taken in accordance with

such directions, nor for the withdrawal of funds from such account by checks properly signed by the Contractor and properly endorsed in the absence of contrary directions from the Contracting Officer. Any directions received by the bank of deposit upon stationery of the Commission and purporting to be signed by or at the direction of the Commission shall, insofar as the rights, duties, and liabilities of the bank of deposit are concerned, be deemed to be the written directions of the Contracting Officer. Bank accounts established pursuant to this article shall be subject to inspection and audit by representatives of the Government at all reasonable times. The Contractor shall transmit to the Contracting Officer in prescribed form an agreement in duplicate from the bank or banks clearly setting forth the special character of the account being established for the purposes of this contract and the responsibilities of the bank thereunder.

4. *Final Payment and Liquidation of Advances.* Upon completion of the work and its acceptance by the Government, and upon the furnishing by the Contractor of (i) a release, in such form and with such exceptions as may be approved by the Contracting Officer, of all claims against the Government under or arising out of this contract; (ii) an assignment of the Contractor's rights to any refunds, rebates, allowances, accounts receivable, or other credits [fol. 85] applicable to expenditures reimbursed under the contract; (iii) a closing financial statement; and (iv) the accounting for Government-owned property required by the Article entitled "Property" the Government shall promptly pay to the Contractor the unpaid balance of allowable costs and fixed fee, less any sum that may be necessary to settle any unsettled claims in connection with this contract, or any claim the Government may have against the Contractor. If the advances and special accounts have not been fully liquidated prior to final payment, the unliquidated balance thereof shall be returned or accounted for to the Government in such manner as the Commission directs.

5. *Review and Approval of Costs Incurred.* The Contractor shall prepare and submit annually as of June 30 a

certified voucher, for the total net expenditures accrued (i.e., net costs incurred) for the period covered by the voucher, and the Commission, after audit and appropriate adjustment, will approve such voucher. This approval by the Commission will constitute an acknowledgment by the Commission that the net costs incurred are allowable under the contract and that they have been recorded in the accounts maintained by the Contractor in accordance with Commission accounting policies, but will not relieve the Contractor of responsibility for the Commission's assets in its care, for appropriate subsequent adjustments, or for errors later becoming known to the Commission.

6. *Claims.* Claims for credit against funds advanced or for payment shall be accompanied by such supporting documents and justification as the Contracting Officer shall prescribe.

7. *Discounts.* The Contractor shall take and afford the Government the advantage of all available cash and trade discounts, rebates, allowances, credits, salvage, commissions and bonifications.

8. *Revenues.* All revenues other than the Contractor's fixed fee or fees, if any, accruing to the Contractor in connection with the work under this contract shall be accounted for as provided in paragraph 3.a. of this Article.

9. *Direct Payment of Charges—Deductions.* The Government reserves the right; upon ten days' written notice from the Contracting Officer to the Contractor, to pay directly to the persons concerned any charges for services, materials, or freight which otherwise would be allowable under this contract. Any payment so made shall discharge the Government of all liability to the Contractor therefor.

Article VIII—Assignment

Neither this contract nor any interest therein nor claim thereunder shall be assigned or transferred by the Contractor, except as expressly authorized in writing by the Contracting Officer.

[fol. 86] Article IX—Accounts, Records and Inspection

1. *Accounts.* The Contractor shall maintain a separate and distinct set of accounts showing and supporting all allowable costs incurred, revenues earned, fixed fee accruals, and the receipt, use and disposition of all Government property coming into the possession of the Contractor under this contract. The system of accounts employed by the Contractor shall be satisfactory to the Commission and in accordance with generally accepted accounting principles.

2. *Inspection and Audit of Accounts and Records.* All books of account and records relating to this contract shall be subject to inspection and audit by the Commission at all reasonable times, and the Contractor shall afford the Commission proper facilities for such inspection and audit.

3. *Audit of Subcontractors' Records.* The Contractor also agrees, with respect to any subcontracts (including lump-sum or unit price subcontracts) where, under the terms of the subcontract, costs incurred are a factor in determining the amount payable to the subcontractor of any tier, to conduct an audit of the costs of the subcontract in a manner satisfactory to the Commission or to have the audit conducted by the next higher tier subcontractor in a manner satisfactory to the Contractor and the Commission, except where the Commission upon the recommendation of the Contractor elects to waive such audit or to approve other arrangements for the conduct of the audit.

4. *Disposition of Records.* Except as otherwise directed by the Contracting Officer or agreed upon by the Government and the Contractor, all financial and cost reports, books of account and supporting documents, and other data evidencing costs allowable and revenues accrued under this contract, shall be property of the government, and shall be delivered to the Government or otherwise disposed of by the Contractor either as the Contracting Officer may from time to time direct during the progress of the work or in any event as the Contracting Officer shall direct upon completion or termination of this contract and final audit of all accounts hereunder. All other records in the possession of the Contractor relating to this contract shall be preserved by the Contractor for a period of six years

after final settlement of the contract or otherwise disposed of in such manner as may be agreed upon by the Government and the Contractor.

5. *Reports.* The Contractor shall furnish such progress reports and schedules, financial and cost reports, and other reports concerning the work under this contract as the Contracting Officer may from time to time require.

6. *Inspections.* The Commission shall have the right to inspect the work and activities of the Contractor under this contract at such time and in such manner as it shall deem appropriate.

[fol. 87] 7. *Subcontracts.* The Contractor further agrees to require the inclusion of provisions similar to those in paragraphs 1 through 6 of this Article in all subcontracts of any tier negotiated hereunder (including lump-sum or unit-price subcontracts) where, under the terms of the subcontract, costs incurred are a factor in determining the amount payable to the subcontractor.

8. *Internal Audit.* The Contractor agrees to conduct an audit and examination satisfactory to the Commission of its own records, operations, expenses, and the transactions with respect to costs claimed to be allowable under this contract annually and at such other times as shall be mutually agreed upon.

Article X—Examination of Records

1. The Contractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall have access to and the right to examine any directly pertinent books, documents papers, and records of the Contractor involving transactions related to this contract until the expiration of three years after final payment under this contract unless the Commission authorizes their prior disposition.

2. The Contractor further agrees to include in all his subcontracts hereunder a provision to the effect that the subcontractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor involving transactions related to the subcontract until the expiration of three years after final

payment under this contract unless the Commission authorizes their prior disposition. The term "subcontract" as used herein means any purchase order or agreement to perform all or any part of the work or to make or furnish any materials required for the performance of this contract, but does not include (i) purchase orders not exceeding \$1,000, (ii) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public, or (iii) subcontracts or purchase orders for general inventory items not specifically identifiable with the work under this contract.

3. Nothing in this contract shall be deemed to preclude an audit by the General Accounting Office of any transaction under this contract.

Article XI—Workmanship and Materials

1. *Grade of Workmanship and Materials.* Unless otherwise directed by the Contracting Officer or expressly provided for by specifications issued under this contract:

a. All workmanship shall be first class.

[fol. 88] b. All articles, equipment and materials incorporated in the work are to be:

(1) New and of the most suitable grade of their respective kinds for the purpose.

(2) In accordance with any applicable drawings and specifications.

(3) Installed to the satisfaction and with the approval of the Contracting Officer.

Where equipment, materials, or articles are referred to in the specifications as "equal to" any particular standard, the Contracting Officer shall decide the question of equality.

2. *Samples and Test Results.* If the Contracting Officer so requires, the Contractor shall submit for approval samples of or test results on any materials proposed to be incorporated in the work before making any commitment for the purchase of such materials.

Article XII—Property

1. *Furnishing of Government Property.* The Government reserves the right to furnish any property or services required for the performance of the work under this contract.

2. *Title to Property.* Title to all property furnished by the Government shall remain in the Government except as otherwise provided in this Article. Except as otherwise provided by the Contracting Officer, title to all materials, equipment, supplies, and tangible personal property of every kind and description purchased by the Contractor, the cost of which is allowable under this contract, shall pass directly from the vendor to the Government. Title to other property, the cost of which is allowable under this contract, shall pass to and vest in the Government upon (i) issuance for use of such property in the performance of this contract, or (ii) commencement of processing or use of such property in the performance of this contract, or (iii) reimbursement of the cost thereof by the Government, whichever first occurs. Property furnished by the Government and property purchased or furnished by the Contractor for the Government's account title to which vests in the Government under this paragraph is hereinafter referred to as Government Property.

[fol. 89] 3. *Identification.* To the extent directed by the Contracting Officer, the Contractor shall identify Government Property coming into the Contractor's possession or custody by marking or segregation in such a way, satisfactory to the Contracting Officer, as shall indicate its ownership by the Government.

4. *Disposition.* The Contractor shall make such disposition of Government Property which has come into the possession or custody of the Contractor under this contract as the Contracting Officer shall direct. When authorized in writing by the Contracting Officer during the progress of the work or upon completion or termination of this contract, the Contractor may, upon such terms and conditions as the Contracting Officer may approve, sell or exchange such property, or acquire such property at a price agreed upon by the Contracting Officer and the Contractor as the fair value thereof. The amount received by the Con-

tractor as the result of any disposition shall be deposited or accounted for as provided in paragraph 3.a. of Article VII, or such amount and/or the amount of the agreed fair value of any such property acquired by the Contractor shall be otherwise credited to the account of the Government, as the Contracting Officer may direct. Upon completion of the work or the termination of this contract the Contractor shall render an accounting, as prescribed by the Contracting Officer of all Government Property which has come into the possession or custody of the Contractor under this contract.

5. *Protection of Government Property—Classified Materials.* The Contractor shall take all reasonable precautions, as directed by the Contracting Officer; or in the absence of such directions in accordance with sound industrial practice, to safeguard and protect Government Property in the Contractor's possession or custody. Special measures shall be taken by the Contractor in the protection of and accounting for any classified or special materials involved in the performance of this contract, in accordance with the regulations and requirements of the Commission.

6. *Risk of Loss of Government Property.* The Contractor shall not be liable for loss or destruction of or damage to Government Property in the Contractor's possession unless such loss, destruction or damage results from wilful misconduct or lack of good faith on the part of the Contractor's managerial personnel, or unless such loss, destruction or damage results from a failure on the part of the Contractor's managerial personnel, to take all reasonable steps to comply with any appropriate written directives of the Contracting Officer to safeguard such property under paragraph 5. hereof. The term "Contractor's managerial personnel" as used herein means the Contractor's director, officers and any of its managers, superintendents, or other equivalent representatives who have supervision or direction of (i) all or substantially all of the Contractor's business; or (ii) all or substantially all of the Contractor's operation at any one plant or separate location at which this contract is being performed; or (iii) a separate and complete major industrial operation in connection with the performance of this contract; or (iv) a separate and complete major construction, alteration or repair operation in connection with performance of this contract.

[fol. 90] 7. *Steps to be Taken in Event of Loss.* Upon the happening of any loss or destruction of or damage to Government Property in the possession or custody of the Contractor the Contractor shall immediately inform the Contracting Officer of the occasion and extent thereof, shall take all reasonable steps to protect the property remaining, and shall repair or replace the lost, destroyed, or damaged property if and as directed by the Contracting Officer, but shall take no action prejudicial to the right of the Government to recover therefor and shall furnish to the Government on request all reasonable assistance in obtaining recovery.

8. *Government Property for Government Use Only.* Government Property shall be used only for the performance of this contract.

Article XIII—Bonds and Insurance

Required Bonds and Insurance—Exclusion of Government Property. The Contractor shall procure and maintain such bonds and insurance as are required by law or by the written directions of the Contracting Officer. The terms of any such bond or insurance policy shall be submitted to the Contracting Officer for approval. In view of the provisions of the Article entitled "Property", the Contractor shall not procure or maintain for its own protection any insurance (including self-insurance or reserves) covering loss or destruction of or damage to Government Property.

Article XIV—State and Local Taxes

1. The Contractor agrees to notify the Commission of any State or local tax, fee, or charge levied or purported to be levied on or collected from the Contractor with respect to the contract work or any transaction thereunder and constituting an allowable item of cost if due and payable, but which, in the opinion of the Contractor or under the position of the Commission as communicated to the Contractor is inapplicable or invalid; and the Contractor further agrees to refrain from paying any such tax, fee, or charge, unless authorized by the Commission. Any State or local tax, fee, or charge paid with the approval of the Commission or on the basis of advice from the Commission that such

tax, fee, or charge is applicable and valid, and which would otherwise be an allowable item of cost, shall not be disallowed as an item of cost by reason of any subsequent ruling or determination that such tax, fee, or charge was in fact inapplicable or invalid.

2. The Contractor agrees to take such action as may be required or approved by the Commission to cause any such tax, fee, or charge referred to above to be paid under protest and to take such actions as may be required or approved by the Commission to seek recovery of any payment made, including assignment to the Government or its designee of all rights to an abatement or refund thereof, and granting permission for the Government to join with the Contractor in any proceedings for the recovery thereof or to sue for recovery in the name of the Contractor. [fol. 91] If the Commission directs the Contractor to institute litigation to enjoin the collection of or to recover payment of any such tax, fee, or charge referred to above, or if a claim or suit is filed against the Contractor for a tax, fee, or charge he has refrained from paying in accordance with this Article, the procedures and requirements of the Article entitled "Litigation and Claims" shall apply and the costs and expenses incurred by the Contractor shall be allowable items of cost, as provided in this contract, together with the amount of any judgment rendered against the Contractor.

3. The Government shall save the Contractor harmless from penalties and interest incurred through compliance with this Article.

Article XV—Litigation and Claims

1. *Initiation of Litigation.* If the Government requires the Contractor to initiate litigation, including proceedings before administrative agencies, in connection with this contract, the Contractor shall proceed with the litigation in good faith as directed from time to time by the Contracting Officer.

2. *Defense and Settlement of Claims.* The Contractor shall give the Contracting Officer immediate notice in writing (i) of any action, including any proceeding before an administrative agency, filed against the Contractor arising out of the performance of this contract, and (ii) of any

claim against the Contractor the cost and expense of which is allowable under the Article entitled "Costs and Expenses". Except as otherwise directed by the Contracting Officer in writing, the Contractor shall furnish immediately to the Contracting Officer copies of all pertinent papers received by the Contractor with respect to such action or claim. To the extent not in conflict with any applicable policy of insurance, the Contractor may with the Contracting Officer's approval settle any such action or claim, shall effect at the Contracting Officer's request an assignment and subrogation in favor of the Government of all the Contractor's rights and claims (except those against the Government) arising out of any such action or claim against the Contractor, and, if required by the Contracting Officer, shall authorize representatives of the Government to settle or defend any such action or claim and to represent the Contractor in, or to take charge of, any action. If the settlement or defense of an action or claim against the Contractor is undertaken by the Government, the Contractor shall furnish all reasonable assistance in effecting a settlement or asserting a defense. Where an action against the Contractor is not covered by a policy of insurance the Contractor shall with the approval of the Contracting Officer proceed with the defense of the action in good faith, and in such event the defense of the action shall be at the expense of the Government; provided, however, that the Government shall not be liable for such expense to the extent that it would have been compensated for by insurance which was required by law or by the written direction of the Contracting Officer, but which the Contractor failed to secure through its own fault or negligence.

[fol. 92] Article XVI—Subcontracts and Purchase Orders

1. *When Subcontracts Authorized—Requirements Applicable to Subcontracts and Purchase Orders.* The Contractor shall, when ordered by the Contracting Officer, and may, but only when authorized by the Contracting Officer, enter into subcontracts in writing for the performance at the site of the work described in the Article entitled "Statement of Work" of any part of the work under this contract. Purchase orders shall not be entered into by the Contractor for items whose purchase is ex-

pressly prohibited by the written directions of the Contracting Officer. All subcontracts for the performance at the site of the work described in the Article entitled "Statement of Work" shall be submitted to the Contracting Officer for approval. The Government reserves the right at any time to require that the Contractor submit any or all other contractual arrangements, including but not limited to purchase orders or classes of purchase orders, for approval, and provide information concerning methods, practices, and procedures used or proposed to be used in subcontracting and purchasing. The Contractor shall use methods, practices or procedures in subcontracting which are acceptable to the Commission. Subcontracts and purchase orders shall not relieve the Contractor of any obligation under this contract (including, among other things, the obligation properly to supervise and coordinate the work of subcontractors) and shall be in such form and contain such provisions as are required by this contract or as the Contracting Officer may prescribe.

2. Effect of Subcontracting on Fee.

a. The subcontracting of any part of the work under this contract shall not entail any adjustment in the Contractor's fixed fee unless this contract has been entered into on the understanding, expressly stated in the Article entitled "Statement of Work", that such part of the work would not be subcontracted, and in that event an equitable downward adjustment in the fixed fee shall be made and the contract shall be modified in writing accordingly. A failure to agree on an equitable adjustment under this paragraph shall be deemed to be a dispute within the meaning of the Article entitled "Disputes".

b. It is understood and agreed that the Contractor will enter into a subcontract for the performance of the electrical work required under this contract; that said subcontract will be on a cost-plus-fixed-fee basis, subject to the approval of the Contracting Officer; and that the fixed fee paid under said subcontract shall not be an allowable cost under this contract, but shall be paid by the Contractor out of the Contractor's fixed fee.

Article XVII—Safety, Health and Fire Protection

The Contractor shall take all reasonable precautions in the performance of the work under this contract to protect the health and safety of employees and of members of the public and to minimize danger from all hazards to life and property, and shall comply with all health, safety and fire protection regulations and requirements (including reporting requirements) of the Commission. In the event that the Contractor fails to comply with said regulations or requirements of the Commission, the Contracting Officer may without prejudice to any other legal or contractual rights of the Commission, issue an order stopping all or any part of the work; thereafter a start order for resumption of work may be issued at the discretion of the Contracting Officer. The Contractor shall make no claim for an extension of time or for compensation or damages by reason of or in connection with such work stoppage.

[fol. 93] Article XVIII—Contractor's Organization.

1. *Organization Chart.* As promptly as possible after the execution of this contract the Contractor shall furnish to the Contracting Officer a chart showing the names, duties, and organization of key personnel to be employed in connection with the work, and shall furnish from time to time supplementary information reflecting changes therein.

2. *Supervising Representative of Contractor.* Unless otherwise directed by the Contracting Officer, a competent full time resident supervising representative of the Contractor satisfactory to the Contracting Officer shall be in charge of the work at the site at all times.

3. *Control of Employees.* The Contractor shall be responsible for maintaining satisfactory standards of employee competency, conduct and integrity and shall be responsible for taking such disciplinary action with respect to his employees as may be necessary. In the event the Contractor fails to remove any employee from the contract work whom the Commission deems incompetent, careless or insubordinate, or whose continued employment on the work is deemed by the Commission to be contrary to the

public interest, the Government reserves the right to require the Contractor to remove the employee.

Article XIX—Patents

Indemnity. Except as otherwise provided, the Contractor agrees to indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement upon any Letters Patent of the United States (except Letters Patent issued upon an application which is now or may hereafter be, for reasons of national security, ordered by the Government to be kept secret or otherwise withheld from issue) arising out of the performance of this contract or out of the use or disposal by or for the account of the Government of supplies furnished or construction work performed hereunder; except, however, infringement necessarily resulting from the Contractor's compliance with written specifications or provisions for other than standard parts or components manufactured or supplied by the Contractor or resulting from specific written instructions given by the Commission for the purpose of directing a manner of performance of the contract not normally utilized by the Contractor.

Article XX—Security

1. *Contractor's Duty to Safeguard Restricted Data and Other Classified Information.* In the performance of the work under this contract the Contractor shall, in accordance with the Commission's security regulations and requirements, be responsible for safeguarding restricted data and other classified matter and protecting against sabotage, espionage, loss and theft, the classified documents, materials, equipment, processes, etc., as well as such other material of high intrinsic or strategic value as may be in the Contractor's possession in connection with performance of work under this contract. Except as otherwise expressly provided in the specifications the Contractor shall upon completion or termination of this contract transmit to the Commission any classified matter in the possession of the Contractor or any person under the Contractor's control in connection with performance of this contract.

[fol. 94] 2. *Regulations.* The Contractor agrees to conform to all security regulations and requirements of the Commission.

3. *Definition of Restricted Data.* The term "Restricted Data", as used in this article, means all data concerning (i) design, manufacture, or utilization of atomic weapons; (ii) the production of special nuclear material; or (iii) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to Section 142 of the Atomic Energy Act of 1954.

4. *Security Clearance of Personnel.* Except as the Commission may authorize, in accordance with the Atomic Energy Act of 1954, the Contractor shall not permit any individual to have access to Restricted Data until the designated investigating agency shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual and the Commission shall have determined that permitting such person to have access to Restricted Data will not endanger the common defense and security. As used in this paragraph, the term "designated investigating agency" means the United States Civil Service Commission or the Federal Bureau of Investigation, or both, as determined pursuant to the provisions of the Atomic Energy Act of 1954.

5. *Criminal Liability.* It is understood that disclosure of information relating to the work or services ordered hereunder to any person not entitled to receive it, or failure to safeguard any Restricted Data or any top secret, secret, or confidential matter that may come to the Contractor or any person under the Contractor's control in connection with work under this contract, may subject the Contractor, his agents, employees, and subcontractors to criminal liability under the laws of the United States. (See the Atomic Energy Act of 1954, 68 Stat. 919). (See also Executive Order 10404 of February 1, 1950, 15 F. R. 597.)

6. *Subcontracts and Purchase Orders.* Except as otherwise authorized in writing by the Contracting Officer, the Contractor shall insert provisions similar to the foregoing in all subcontracts and purchase orders under this contract.

Article XXI—Disputes

Except as otherwise provided in this contract, any dispute concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided by the Contracting Officer, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Contractor. Within 30 days from the date of receipt of such copy, the Contractor may appeal by mailing or otherwise furnishing to the Contracting Officer a written appeal addressed to the Commission, and the decision of the Commission shall, unless determined by a court of competent jurisdiction to have been fraudulent, arbitrary, capricious, or so grossly erroneous as necessarily to imply bad faith, or is not supported by substantial evidence, be final and conclusive; Provided, That if no such appeal to the Commission is taken, the decision of the Contracting Officer shall be final and conclusive. In connection with [fol. 95] any appeal proceeding under this clause, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its appeal. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the contract and in accordance with the Contracting Officer's decision.

Article XXII—Labor

1. *Davis-Bacon Act* (40 U.S.C. 276a(7)).

a. All mechanics and laborers employed or working directly upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Copeland Act (Anti-Kickback) Regulations (29 CFR, Part 3)) the full amounts due at the time of payment, computed at wage rates not less than those contained in the applicable wage determination decision of the Secretary of Labor, regardless of any contractual relationship which may be alleged to exist between the Contractor or subcontractor and such laborers and mechanics; and a copy of the wage determination decision shall be kept posted by the Contractor at the

site of the work in a prominent place where it can be easily seen by the workers. The "applicable wage determination decision of the Secretary of Labor", as used in the preceding sentence, shall mean the following: (i) as to construction work initially authorized by written directive pursuant to Article II, paragraph 1., during the period from August 12, 1955 through June 30, 1956, the applicable wage determination decision of the Secretary of Labor shall be the wage predetermination for Oak Ridge, Tennessee, dated August 12, 1955, a copy of which is attached hereto and made a part hereof; (ii) as to construction work initially authorized by written directive pursuant to Article II, paragraph 1., during any subsequent fiscal year (i.e., July 1 through June 30) the applicable wage determination decision of the Secretary of Labor shall be the wage predetermination for Oak Ridge, Tennessee, in effect at the beginning of such fiscal year.

b. In the event it is found by the Contracting Officer that any laborer or mechanic employed by the Contractor or any subcontractor directly on the site of the work covered by this contract has been or is being paid at a rate of wages less than the rate of wages required by subparagraph a. of this paragraph, the Contracting Officer may (i) by written notice to the Government prime contractor terminate his right to proceed with the work, or such part of the work as to which there has been a failure to pay said required wages, and (ii) prosecute the work to completion by contract or otherwise, whereupon such contractor and his sureties shall be liable to the Government for any excess costs occasioned the Government thereby.

c. Subparagraphs a. and b. of this paragraph shall apply to this contract to the extent that it is (i) a prime contract with the Government subject to the Davis-Bacon Act or (ii) a subcontract under such prime contract.

[fol. 96] ²/₄ Eight-Hour Laws—Overtime Compensation

No laborer or mechanic doing any part of the work contemplated by this contract, in the employ of the Contractor or any subcontractor contracting for any part of said work contemplated, shall be required or permitted to work more than eight hours in any one calendar day upon such work, except upon the condition that compensation is paid to such

laborer or mechanic in accordance with the provisions of this paragraph. The wages of every laborer and mechanic employed by the Contractor or any subcontractor engaged in the performance of this contract shall be computed on a basic day rate of eight hours per day and work in excess of eight hours per day is permitted only upon the condition that every such laborer and mechanic shall be compensated for all hours worked in excess of eight hours per day at not less than one and one-half times the basic rate of pay. For each violation of the requirements of this paragraph a penalty of five dollars shall be imposed for each laborer or mechanic for every calendar day in which such employee is required or permitted to labor more than eight hours upon said work without receiving compensation computed in accordance with this paragraph, and all penalties thus imposed shall be withheld for the use and benefit of the Government: Provided, That this stipulation shall be subject in all respects to the exceptions and provisions of the Eight-Hour Laws as set forth in 40 U.S.C. 321, 324, 325, 325a, and 326, which relate to hours of labor and compensation for overtime.

3. Apprentices

Apprentices will be permitted to work only under a bona fide apprenticeship program registered with a State Apprenticeship Council which is recognized by the Federal Committee on Apprenticeship, U. S. Department of Labor; or if no such recognized Council exists in a State, under a program registered with the Bureau of Apprenticeship, U. S. Department of Labor.

4. Payroll Records and Payrolls

a. Payroll records will be maintained during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records will contain the name and address of each such employee, his correct classification, rate of pay, daily and weekly number of hours worked, deductions made and actual wages paid. The Contractor will make his employment records available for inspection by authorized representatives of the Contracting Officer and the U. S.

Department of Labor, and will permit such representatives to interview employees during working hours on the job.

b. A certified copy of all payrolls will be submitted weekly to the Contracting Officer. The Government prime contractor will be responsible for the submission of certified copies of the payrolls of all subcontractors. The certification will affirm that the payrolls are correct and complete, that the wage rates contained therein are not [fol. 97] less than the applicable rates contained in the wage determination decision of the Secretary of Labor attached to this contract, and that the classifications set forth for each laborer or mechanic conform with the work he performed.

5. *Copeland (Anti-Kickback) Act—Nonrebate of Wages*

The regulations of the Secretary of Labor applicable to contractors and subcontractors (29 CFR, Part 3), made pursuant to the Copeland Act, as amended (40 U.S.C. 276e) and to aid in the enforcement of the Anti-Kickback Act (18 U.S.C. 874) are made a part of this contract by reference. The Contractor will comply with these regulations and any amendments or modifications thereof and the Government prime contractor will be responsible for the submission of affidavits required of subcontractors thereunder. The foregoing shall apply except as the Secretary of Labor may specifically provide for reasonable limitations, variations, tolerances, and exemptions.

6. *Withholding of Funds to Assure Wage Payment*

There may be withheld from the Contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics employed by the Contractor or any subcontractor the full amount of wages required by this contract. In the event of failure to pay any laborer or mechanic all or part of the wages required by this contract, the Contracting Officer may take such action as may be necessary to cause the suspension, until such violations have ceased, of any further payment, advance, or guarantee of funds to or for the Government prime contractor.

7. *Subcontracts—Termination*

The Contractor agrees to insert paragraphs 1 through 7 hereof in all subcontracts and further agrees that a breach of any of the requirements of these paragraphs may be grounds for termination of this contract. The term "Contractor" as used in such paragraphs in any subcontract shall be deemed to refer to the subcontractor except in the phrase "Government prime contractor."

8. *Convict Labor*

In connection with the performance of work under this contract the Contractor shall not employ any person undergoing sentence of imprisonment at hard labor.

9. *Nondiscrimination in Employment*

a. In connection with the performance of work under this contract, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, religion, color, or national origin. The aforesaid provision shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; lay-off or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of the nondiscrimination clause.

b. The Contractor further agrees to insert the foregoing provision in all subcontracts hereunder, except (i) subcontracts for standard commercial supplies or raw materials, (ii) subcontracts to be performed outside the United States where no recruitment of workers within the limits of the United States is involved, (iii) purchase orders on pocket-size forms similar to U. S. Standard Form 44, and (iv) subcontracts to meet other special requirements or emergencies, if recommended by the Committee on Government Contracts. In the case of purchase orders hereunder which do not exceed \$5,000.00, the last sentence of subparagraph a. above may be omitted.

Article XXIII—Notice of Labor Disputes

Whenever an actual or potential labor dispute is delaying or threatens to delay the performance of the work the Contractor shall immediately notify the Contracting Officer in writing. Such notice shall include all relevant information concerning the dispute and its background.

Article XXIV—Covenant Against Contingent Fees

1. *Warranty—Termination or Deduction for Breach.* The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or in its discretion to deduct from the contract price or consideration the full amount of such commission, percentage, brokerage, or contingent fee.

2. *Subcontracts and Purchase Orders.* Unless otherwise authorized by the Contracting Officer in writing the Contractor shall cause provisions similar to the foregoing to be inserted in all subcontracts and purchase orders entered into under this contract.

Article XXV—Officials Not to Benefit

No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

[Fol. 99] Article XXVI—Buy American Act

The Contractor agrees that in the performance of the work under this contract the Contractor, subcontractors, material men and suppliers shall use only such unmanufactured articles, materials and supplies (which term "articles, materials and supplies" is hereinafter referred to in this clause as "supplies") as have been mined or pro-

duced in the United States, and only such manufactured supplies as have been manufactured in the United States substantially all from supplies mined, produced, or manufactured, as the case may be, in the United States. The foregoing provisions shall not apply (i) with respect to supplies excepted by the Commission from the application of the Buy American Act (41 U.S.C. 10a-d), (ii) with respect to supplies for use outside the United States or (iii) with respect to the supplies to be used in the performance of work under this contract which are of a class or kind determined by the Commission not to be mined, produced, or manufactured, as the case may be, in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality, or (iv) with respect to such supplies, from which the supplies to be used in the performance of work under this contract are manufactured, as are of a class or kind determined by the Commission not to be mined, produced, or manufactured, as the case may be, in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality; provided that this exception (iv) shall not permit the use in the performance of work under this contract of supplies manufactured outside the United States if such supplies are manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality.

Article XXVII—Termination

1. *Notice of Termination for Default or Convenience.* The Contracting Officer may at any time terminate performance of the work under this contract in whole or in part for the default of the Contractor, or in whole or from time to time in part for the convenience of the Government, by written notice to the Contractor stating the ground for termination. Such termination shall be effective in the manner and upon the date specified in said notice and shall be without prejudice to any claims which the Government may have against the Contractor. Upon receipt of such notice, the Contractor shall unless the notice directs otherwise, immediately discontinue all work and the placing of all orders for materials, facilities, and supplies in connec-

tion with performance of this contract and shall proceed to cancel promptly all existing orders and terminate all subcontracts insofar as such orders or subcontracts are chargeable to this contract.

2. *Termination for Default.* The performance of the work may be terminated for default if the Contractor refuses or fails to prosecute the work, or any separable part thereof, with such diligence as will insure its completion within a reasonable time; Provided: That the performance of the work shall not be terminated for default because of any delays in the completion of work [fol. 100] due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God, or of the public enemy, acts of Government in either its sovereign or contractual capacity, acts of another contractor in the performance of a contract with the Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather or delays of subcontractors due to such causes, if the Contractor shall within (10) days from the beginning of any such delay (unless the Contracting Officer shall grant a further period of time prior to the date of final settlement of the contract) notify the Contracting Officer in writing of the causes of delay, who shall ascertain the facts and the extent of the delay and extend the time for completing the work when in his judgment the findings of fact justify such an extension, and his findings of fact thereon shall be final and conclusive on the parties hereto, subject only to appeal by the Contractor to the Commission in accordance with the Article entitled "Disputes".

3. *Entry by Commission after Default.* If performance of the work under this contract is terminated for the default of the Contractor, the Government may enter upon the premises and take possession of all materials, tools, machinery, equipment, and appliances which may be owned by or in the possession of the Contractor and of all options, privileges, and rights, may complete or employ any other person or persons to complete the work, and the Contractor shall be liable to the Government for costs occasioned the Government by the default. Rental shall be

paid to the Contractor for Contractor-owned equipment so retained by the Government at rates prescribed pursuant to the Article entitled "Costs and Expenses".

4. *Terms of Settlement.* Upon the termination of performance of work under this contract, full and complete settlement of all claims of the Contractor with respect to the terminated work shall be made as follows:

a. *Assumption of Contractor's Obligations.* The Government may, at the discretion of the Commission, assume and become liable for all obligations, commitments and claims that the Contractor may have theretofore in good faith undertaken or incurred in connection with the terminated work, the cost of which would be allowable in accordance with the provisions of this contract; and the Contractor shall, as a condition of receiving the payments mentioned in this Article, execute and deliver all such papers and take all such steps as the Contracting Officer may require for the purpose of fully vesting in the Government all the rights and benefits of the Contractor under such obligations or commitments.

b. *Payment for Allowable Costs.* The Government shall reimburse the Contractor or allow credit for all allowable costs incurred in the performance of the terminated work and not previously reimbursed or otherwise discharged.

[fol. 101] c. *Payment for Termination Expense.* If performance of work under the contract is terminated for the convenience of the Government, the Government shall reimburse the Contractor for such further expenditures made after the date of termination for the protection of Government property and for such legal and accounting services in connection with settlement as are required or approved by the Contracting Officer.

d. *Payments on Account of Fixed Fee.* If performance of work under the contract is terminated for the convenience of the Government, the Contractor shall be paid that portion of the fixed fee which the work actually completed, as determined by the Contracting Officer, bears to the entire work under this contract less payments previously made on account of the fee. If performance of the work under the contract is terminated for the default of the Contractor, no further payments on account of the fixed fee shall accrue.

e. *Computation of Amount Due.* In arriving at the amount due the Contractor under this Article, there shall be deducted (i) all unliquidated advance or other unliquidated payments on account theretofore made to the Contractor, (ii) any claim which the Government may have against the Contractor in connection with this contract and (iii) deductions under the terms of this contract, and not otherwise recovered by or credited to the Government. Nothing contained in this paragraph shall be construed to limit or affect any other remedies which the Government may have as a result of a default by the Contractor.

f. *Disposition of Advances.* If performance of the work under the contract is terminated for the default of the Contractor, the Contractor shall forthwith remit to the Government the unliquidated balance of any advance under the contract. If performance of work under the contract is terminated for the convenience of the Government, the unliquidated balance of any advance shall be deducted from any payment otherwise due the Contractor, and if the sum due the Contractor is insufficient to cover such balance, the excess thereof shall be remitted by the Contractor to the Government after demand and final audit of all accounts hereunder.

g. *Property Accounting and Release.* The Contractor shall furnish an accounting for Government-owned property as required by the article entitled "Property" and a release and an assignment as required under the Article entitled "Payments and Advances".

Article XXVII—Drawings, Designs, Specifications

All drawings, sketches, designs, design data, specifications, notebooks, technical and scientific data, and all photographs, negatives, reports, findings, recommendations, data and memoranda of every description relating thereto, as well as all copies of the foregoing relating to the work or any part thereof, shall be subject to inspection by the Commission at all reasonable times, and the Contractor and his subcontractors shall afford the Commission proper [fol. 102] facilities for such inspection and, further, shall be the property of the Government and shall be delivered to the Government, or otherwise disposed of by the Con-

tractor either as the Contracting Officer may from time to time direct during the progress of the work or in any event as the Contracting Officer shall direct upon completion or termination of this contract.

Article XXIX—Permits

Except as otherwise directed by the Contracting Officer, the Contractor shall procure all necessary permits or licenses and abide by all applicable laws, regulations, and ordinances of the United States and of the State, territory, and political subdivision in which the work under this contract is performed.

Article XXX—Renegotiation

If this contract is subject to the Renegotiation Act of 1951, as amended, the following provisions shall apply:

1. This contract is subject to the Renegotiation Act of 1951, as amended, (65 Stat. 7; P. L. 764, 83rd Congress) and shall be deemed to contain all the provisions required by Section 104 of said Act.

2. The Contractor agrees to insert the provisions of this Article, including this paragraph 2, in all subcontracts specified in Section 103(g) of the Renegotiation Act of 1951; provided, that the Contractor shall not be required to insert the provisions of this Article in any subcontract exempted by or pursuant to Section 106 of the Renegotiation Act of 1951, as amended.

Article XXXI—Letter Contract Superseded

Letter Contract No. AT-(40-1)-2014 is hereby merged in and superseded by this contract.

Article XXXII—Approval Required

This contract shall be subject to the approval of the Director of Production of the Commission, and shall not be binding unless so approved. As used in this Article the term "Director of Production of the Commission" includes the Director or Deputy Director of Production.

the General Manager, Acting General Manager or Deputy General Manager of the Commission.

[fol. 103] Article XXXIII—Alterations and Additions

The following alterations in or additions to the provisions of this form of contract were made prior to execution of the contract by the parties:

None.

In Witness Whereof, the parties hereto have executed this contract as of the day and year above written.

The United States of America, By: U. S. Atomic Energy Commission, By: s/E. A. Wende, Deputy Manager, Oak Ridge Operations, Contracting Officer, The H. K. Ferguson Company, Inc., By: s/Robert R. Cutler, V. P. & Central District Mgr.

Witnesses As to Signature of Contractor:

s/Lucille Weilert, Cleveland, Ohio. s/Robert H. Gage, Cleveland, Ohio.

Approval of Director of Production, U. S. Atomic Energy Commission.

s/E. J. Bloch, Director of Production, Feb 29 1956

[fol. 104] I, *F. H. Maag*, certify that I am the secretary of the corporation named Contractor herein; that Robert R. Cutler, who signed this contract on behalf of the Contractor, was then Vice President of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

In Witness Whereof, I have hereunto affixed my hand and the seal of said corporation, this 15th day February, 1956.

s/F. H. Maag, Secretary.

(Corporate Seal)

[fol. 1] IN THE CHANCERY COURT FOR DAVIDSON COUNTY,
TENNESSEE

No. 80,060

UNITED STATES OF AMERICA AND UNION CARBIDE CORPORATION,

v.

B. J. BOYD, COMMISSIONER

STIPULATION No. 1

It is hereby stipulated by the parties to this cause as follows:

The Oak Ridge Area

The Oak Ridge Area of the Atomic Energy Commission is a Government-owned tract, located in Tennessee in the counties of Anderson and Roane, containing at the present time approximately 46,100 acres of land. A map of the area is filed as Exhibit C-1. The tract acquired in 1942 and 1943 by the U. S. Army Corps of Engineers, was principally a rural area containing three small communities and a population of about 3,000 persons. By mid-1945 the tract housed more than 75,000 persons, and more than 82,000 persons were employed in the construction and operation of the Government-owned facilities producing fissionable material for atomic weapons.

[fol. 2] The site for the Oak Ridge area was selected in late 1942 by the Army Corps of Engineers. It was selected because it met the following factors: (a) isolation from large centers of population; (b) of sufficient size to accommodate several large plants in flat areas separated by natural barriers; (c) near dependable electric power in large quantities; (d) near a large supply of water and (e) easily accessible by rail and motor transport. The 58,000 acres originally comprising the Oak Ridge area were acquired at a cost of \$2,600,000.

Situated in the Oak Ridge area today are three main AEC operating facilities concerned with atomic energy work—two plants for production and related research, and a third which serves as a nuclear research center.

The AEC operating facilities are The Gaseous Diffusion Plant for the production of U-235; The Y-12 Plant for production of various special products, including weapons components and stable isotopes, and biology research, reactor engineering, and process improvement and development; and Oak Ridge National Laboratory, a nuclear research center and source of most of the nation's radioactive isotopes. Near the gaseous diffusion plant is a high-temperature, high-pressure, variable-frequency steam power plant also owned by AEC, with a generating capacity of 238,000 kilowatts—twice the capacity of Norris Dam generating facilities.

[fol. 3] Also situated in the Oak Ridge area are other AEC facilities used for collecting, evaluating, cataloguing, reproducing, and disseminating scientific and technical information; for providing assistance to universities in developing graduate and research programs in atomic energy; for conducting training programs in radioisotope uses; for a medical research center; for a museum and national exhibit program on atomic energy; and for an experimental farm engaged in a program of radiological research of agricultural implication.

The community of Oak Ridge was built by the United States Government to provide living accommodations, shopping, and other commercial and municipal facilities for personnel employed in the Oak Ridge area. The community occupied approximately 20 square miles in the northeast corner of the Oak Ridge area. Construction of the community was begun early in 1943. Built in two and one-half years, the community became the fifth largest city in the state, having a peak population in 1945 of 75,000 persons. The population decreased more than 50% after World War II and is presently estimated to be approximately 28,000.

Under a Master Plan for the community's future physical development, new neighborhoods were developed in 1948-1949. Twenty-nine (29) garden-type apartments with [fol. 4] 453 units have been completed and hundreds of new houses to replace old temporary units too costly to maintain have been built. In addition, three hundred and fifty (350) new apartments units and one hundred (100)

row-type houses have been erected. All of these developments were constructed and paid for by AEC.

In 1954, five hundred (500) permanent, modern, three-bedroom houses for rental to project personnel were constructed by private enterprise. Located at the eastern end of the community, where hundreds of temporary flat-top houses were formerly situated, these units were built with private capital under Title VIII of the National Housing Act. Another four hundred (400) units for sale or rent were constructed with private capital in the western end of the community under Title IX of the National Housing Act. All of this construction was on land owned by AEC and leased to private organizations and individuals.

Since the end of World War II, all of the AEC Government-owned hutments and trailers have been removed from the area. Use of other temporary houses also has been gradually reduced, as permanent housing has been constructed to replace the temporary structures. Hundreds of semi-permanent frame-type housing units, as well as three hundred and seventy-five (375) flat-tops have been rehabilitated by the Atomic Energy Commission. [fol. 5] Other community facilities were added or improved, and a program was established under which suitable Atomic Energy Commission vacant land was leased for construction of houses and commercial facilities, and church groups purchased land.

This community had, during the period involved in this litigation, several shopping centers, the principal ones being those located in Jackson Square, Grove Center and the new "Downtown" center on the Turnpike; these centers contained department, grocery and drug stores, banks, restaurants, laundries, and most other businesses found in any community of comparable size. The Community also had several theaters and a wide variety of recreational facilities. All of these enterprises were privately owned and operated, either in privately owned buildings or in buildings leased from the Government.

In 1955 Congress enacted the "Atomic Energy Community Act of 1955" (42 U.S.C.A., Sec. 2301 et seq.) which provides for the termination of Government ownership

and management of the Community of Oak Ridge. Under this Act, the sale of AEC commercial and residential properties to private purchasers, and the transfer of municipal functions and "municipal installations" (as defined in the Act) to local entities was authorized.

The municipal operations provided by AEC for the Oak Ridge community since its construction, and during [fol. 6] the period material to this litigation, have included the providing of schools (present enrollment in excess of 6,500 pupils), police and fire protection, health and welfare services, construction and maintenance of roads and streets, providing electrical and water distribution, sewage and garbage removal, and other municipal services.

All the facilities of the Oak Ridge School System, which consisted of one senior high school, two junior high schools, and eight elementary schools, were built by and at the cost of the Government. The costs of operation of the Oak Ridge School System and the costs of repair and maintenance of the facilities of this School System were borne by AEC. The School System was operated for AEC by the Anderson County Board of Education under a cost-type contract, under which AEC paid the cost of the school operation, which for the fiscal year 1956 was \$2,090,196.00, and for the fiscal year 1957 was \$2,068,401.00, and in addition paid to Anderson County Board of Education an overhead allowance of \$9,900.00 annually. No county or state taxes collected for support of schools in Tennessee were shared with AEC or utilized by the county to defray the cost of operation of the Oak Ridge schools.

Other municipal services, including the distribution of electricity and water, for the Community of Oak Ridge were during the period involved in this litigation and subsequent thereto, provided by AEC through its community management contractor, Management Services, Inc. (hereinafter referred to as MSI), a domestic profit-type corporation organized under the laws of the State of Tennessee by a group of residents of the Community. MSI has a no-fee cost-type contract with AEC. In addition to providing municipal services in the Community, MSI also managed the AEC commercial and residential prop-

erties in the Community, maintained the Community Streets and the roads through the plant areas, and provided various other services for AEC buildings.

Since 1949 the AEC-owned hospital in the Community has been operated for AEC under a no-fee cost-type contract. Bus service within the Oak Ridge Community, and between the Community and the plant areas, has been provided through AEC buses, also operated under a no-fee, cost-type contract between AEC and American Industrial Transport, Inc., a profit-type Tennessee corporation which was formed locally for this purpose. AEC paid all costs of these operations.

In June, 1959, the residents of the Oak Ridge Community, through a referendum election, incorporated the City of Oak Ridge, and voted in favor of AEC transferring all municipal installations to the City. The present City boundaries include practically the entire Oak Ridge area. As of January 1, 1960, the City had taken over the roads [fol. 8] and streets in the Community area, and the entire school system. It is contemplated that the remaining municipal installations and functions will be transferred to the City on or about July 1, 1960. The total value of the physical properties which have been or will be donated to the City by AEC represent an original cost to the Government of approximately \$40,000,000.00. In addition, AEC has furnished financial and other aid to the City as assistance in organization, and has executed an agreement with the City providing for just and reasonable assistance payments to the City for ten years. It is estimated that these payments will be in excess of \$1,000,000.00 annually at least for the next several years.

Prior to the transfer referred to above there were approximately 122 miles of roads and streets in the Community which were owned and maintained by AEC. The main artery through the community—the Oak Ridge Turnpike—was a part of State Highway #61 before its acquisition in 1943 by the Government. The Turnpike has since been made a four-lane highway and hard surfaced at the expense of the Government. There are, in addition, approximately 60 miles of paved roads and 73 miles of gravel roads which are still owned and maintained by AEC which

connect the plants with the community and surrounding areas. At the request of State officials, AEC permitted certain roads through the community and the plant areas [fol. 9] to be designated and marked as state highways. However, AEC continued to own, and to provide for all of the maintenance and repair of, these roads within the plant area as well as the community roads prior to transfer to the City. None of the gasoline taxes collected by the state have been returned to AEC or in anywise utilized in the construction and maintenance of any of the above roads and streets prior to the transfer to the City. The Tennessee State Highway Department assumed no responsibility for, and expended no funds in, the construction, maintenance, or repair of any of the above roads and streets prior to the transfer to the City. The State Highway Department has recently constructed a secondary road approximately $1\frac{1}{4}$ miles in length across a portion of AEC lands lying southeast of the community. AEC granted to Anderson County an easement for this purpose and contributed the sum of \$118,000.00 to defray the entire cost of construction of that portion of the road which crosses AEC land.

Police protection for the community of Oak Ridge, including the enforcement of the State traffic laws, is now and was during the period material to this litigation provided by employees of MSI, who, although deputized by the Sheriffs of Anderson and Roane Counties, are and were paid by MSI from AEC funds, and are, and were during the period material to this litigation, equipped and uniformed [fol. 10] formed at AEC expense with AEC-owned property. AEC also during such period of time provided at its expense the necessary facilities for the conduct of functions of the Anderson County Trial Justice Court in the Community of Oak Ridge. The enforcement of State traffic laws on AEC roads open to public travel and which are located outside the Community has been and is provided at AEC expense by employees of the Government who hold commissions as County deputies. None of the fines and costs collected for violation of any of the Tennessee Statutes have been received by AEC or utilized to defray the costs of providing Community or other services furnished

by AEC, which services are normally provided by the State and local governments.

All collections and revenues from the several types of municipal services furnished by AEC and rental of AEC properties in the Community are now and were during the period material to this litigation received as Government funds and are used to defray total AEC costs. In addition, lessees and owners of real property located in the Community have paid an annual charge to AEC as compensation for municipal services rendered by AEC. Notwithstanding these collections and receipts, the net costs to AEC of operating the Oak Ridge Community and furnishing the community services were \$3,800,000.00 for the fiscal year 1956 and for the year 1957 were \$3,100,000.00.

[fol. 11] The residential and commercial properties in Oak Ridge disposed of, through June 30, 1957, under the Atomic Energy Act of 1955 (42 U.S.C.A. Sec. 2301 et. seq.) have been sold by the Government for \$14,359,000.00 and represent an original cost to the Government of over \$29,900,000.00. In 1958, the assessed valuation for ad valorem tax purposes of that privately owned property which lies within the Oak Ridge Area of Anderson County (excluding railroads and public utilities) was: real property, \$5,227,975.00; personal property, \$217,530.00, or a total of \$5,445,505.00. In 1953, such assessed valuation of privately owned property (excluding railroads and public utilities) was: real property, \$34,600.00; personal property, \$121,310.00, or a total of \$155,910.00. The total assessment of privately owned property in Anderson County for the year 1958 (excluding railroads and public utilities) was \$12,981,097.00. The total assessment of privately owned property for 1953 (excluding railroads and public utilities) was \$6,182,998.00.

AEC has constructed a new hospital at Oak Ridge, (estimated cost—\$2,900,000.00) which will be transferred as a going concern and without charge to the entity selected by the residents to receive the hospital.

For the fiscal years ending June 30, 1955, June 30, 1956, and June 30, 1957, private businesses operating in Oak [fol. 12] Ridge paid to the State of Tennessee the sum of \$438,956.00, \$672,933.00, and \$714,418.00, respectively, in sales and use taxes. Sales and use taxes paid by similar establishments in Anderson County outside of the Com-

munity of Oak Ridge totaled \$326,779.00, \$478,216.00, and \$432,056.00, respectively, during the same periods of time.

This stipulation may be filed in the above-styled case and read as evidence subject, however, to the right to object to the relevancy and competency of all or any part thereof upon the hearing of the case.

Entered into this 25th day of March, 1960.

United States of America, By Fred Elledge, Jr.,
U. S. Attorney for the Middle District of Tennessee. Union Carbide Corporation, By R. R. Kramer, Solicitor. Alfred T. McFarland, Commissioner. By Milton P. Rice, Solicitor.

Filed this — day of —, 1960.

— —, Clerk and Master.

[fol. 13] IN THE CHANCERY COURT FOR DAVIDSON COUNTY,
TENNESSEE

No. 80,060

UNITED STATES OF AMERICA AND UNION CARBIDE CORPORATION,

v.

B. J. BOYD, COMMISSIONER

STIPULATION 1-A

It is hereby stipulated by the parties to this cause as follows:

I

According to the federal census of 1950, Madison County, Tennessee had a population of 60,128 persons, and its chief city, Jackson, had a population of 30,207 persons. Madison County has a geographical area of 561 square miles.

According to the same census, Washington County, Tennessee had a population of 59,971 persons and its chief city, Johnson City, had a population of 27,864 persons. Washington County has a geographical area of 327 square miles.

Likewise, according to the 1950 census, Anderson County, Tennessee had a population of 59,407 persons. Anderson County has a geographical area of 338 square miles. The largest city in Anderson County, Oak Ridge, had a population in 1950 of 30,229 persons.

For the fiscal year ending June 30, 1955, there was collected from private businesses in Madison, Washington and Anderson Counties sales and use taxes as follows:

[fol. 14]

Madison County	Washington County	Anderson County
\$927,848*	\$1,015,092	\$765,735**

* \$842,568 in Jackson

** \$438,956 in Oak Ridge

For the fiscal year ending June 30, 1956, there was collected from private businesses in Madison, Washington and Anderson Counties and their respective largest cities of Jackson, Johnson City and Oak Ridge sales and use taxes as follows:

Madison County	City of Jackson	Washington County	City of Johnson City
\$1,464,382	\$1,334,452	\$1,598,022	\$1,262,953
Anderson County	City of Oak Ridge		
\$1,151,149	\$672,933		

For the fiscal year ending June 30, 1957, there was collected from private businesses in Madison, Washington and Anderson Counties and their respective largest cities of Jackson, Johnson City and Oak Ridge sales and use taxes as follows:

Madison County	City of Jackson	Washington County	City of Johnson City
\$1,477,596	\$1,335,148	\$1,650,496	\$1,428,680
Anderson County	City of Oak Ridge		
\$1,146,474	\$714,418		

{fol. 15]

II

For the years 1953 and 1958, the assessed valuations of private property, exclusive of railroads and public utilities, in Anderson County were as follows:

	1953	1958
Realty	\$5,304,210	\$11,994,101
Personalty	878,788	986,996
Total	\$6,182,998	\$12,981,097

For the years 1953 and 1958, the assessed valuations of private property, exclusive of railroads and public utilities, in Madison County were as follows:

	1953	1958
Realty	\$30,830,800	\$32,427,000
Personalty	2,268,000	2,236,700
Total	\$33,098,800	\$34,663,700

For the years 1953 and 1958, the assessed valuations of private property, exclusive of railroads and public utilities, in Washington County were as follows:

	1953	1958
Realty	\$20,146,265	\$26,465,610
Personalty	980,645	1,143,000
Total	\$21,126,910	\$27,608,610

This stipulation may be filed in the above-styled case and read as evidence subject, however, to the right to object to the relevancy and competency of all or any part [fol. 16] thereof upon the hearing of the case.

Entered into this — day of —, 1960.

United States of America, By Fred Elledge, Jr.,
U. S. Attorney for the Middle District of Tennessee. Union Carbide Corporation, By R. R. Kramer, Solicitor. Alfred T. McFarland, By George F. McCannless, Attorney General, By Milton P. Rice, Assistant Attorney General, By David M. Pack, Assistant Attorney General, Solicitors.

[fol. 17] IN THE CHANCERY COURT FOR DAVIDSON COUNTY,
TENNESSEE

No. 80,060

UNITED STATES OF AMERICA AND UNION CARBIDE CORPORATION,

v.

B. J. BOYD, COMMISSIONER

STIPULATION No. 2

It is hereby stipulated by the parties to this cause as follows:

The United States of America and the Atomic Energy Commission have made grants or expenditures to the State of Tennessee, its political subdivisions, and others on account of the impact of the atomic energy installation at Oak Ridge and in consequence of the atomic energy program as follows:

1. Entitlements (approximate) under Public Law 874, 81st Congress, 2nd Session, as amended, for the operation and maintenance of public schools paid to the counties of Anderson, Franklin, Campbell, Roane, Loudon, Sullivan, Coffee, Rhea, Knox, Blount, and Morgan, and the cities of Harriman, Lenoir City, Clarksville, Rogersville, Rockwood, Clinton, Knoxville, Maryville, Chattanooga and Bristol during the years 1950 through 1958 attributable to public school attendance of AEC-connected children.

School Year 1950-51	\$ 87,667.00
" " 1951-52	74,402.00
" " 1952-53	99,526.00
" " 1953-54	340,222.00
" " 1954-55	475,629.00
" " 1955-56	560,184.00
" " 1956-57	594,341.00
" " 1957-58	591,279.00

2. Grant under the Defense Housing and Community Facilities Act (Public Law 139, 82nd Congress, 2nd Session) in 1955 to the City of Kingston for water and sewer assistance due to impact of Oak Ridge AEC installation: \$ 153,955.00
3. Payment in the year 1958 by AEC to Roane County, Tennessee, made in lieu of real property taxes on land and buildings removed from taxable ownership: \$ 127,558.00
4. Payments made by the Corps of Engineers in the year 1946 to the Anderson County Board of Education for the operation of Oak Ridge Schools: \$ 56,072.00
5. Payments made by AEC to the Anderson County Board of Education for the operation of Oak Ridge Schools during the period January 1, 1947—June 30, 1958:

[fol. 19]

Fiscal year ending June 30, 1947	\$ 694,739.00
" " " " " 1948	2,257,594.00
" " " " " 1949	2,431,538.00
" " " " " 1950	2,245,987.00
" " " " " 1951	1,961,929.00
" " " " " 1952	2,015,405.00
" " " " " 1953	2,013,135.00
" " " " " 1954	2,116,204.00
" " " " " 1955	2,211,900.00
" " " " " 1956	2,009,900.00
" " " " " 1957	2,002,900.00
" " " " " 1958	2,095,900.00

6. AEC expenditures during the years 1949-1958, inclusive, in support of off-site research activities of the University of Tennessee, Vanderbilt University and Meharry Medical College:

Calendar Year 1949	\$ 67,810.00
" " 1950	143,580.00
" " 1951	211,508.00
" " 1952	227,327.00
" " 1953	267,777.00
" " 1954	235,259.00
" " 1955	292,450.00
" " 1956	293,588.00
" " 1957	310,893.00
" " 1958	372,753.00

7. Donations by AEC. of personal property made pursuant to authority of the Federal Property and Administrative Services Act of 1949, as amended, to the State of Tennessee and its political subdivisions for the years 1950, 1955, 1956, 1957 and 1958:

Calendar Year 1950	\$ 804,424.00
" " 1955	5,849.00
" " 1956	1,217,928.00
" " 1957	1,037,788.00
" " 1958	729,828.00

[fol. 20]

8. Approximate cost to the Government of construction of access roads in Roane and Anderson Counties; rental payments to Knox County for use of Solway Bridge; rental payments to Anderson County for use of Edgemore Bridge; and payments to Anderson County for the repair of Edgemore Bridge:

Fiscal Year 1944	\$ 597,517.00
" " 1945	23,519.00
" " 1946	23,519.00
" " 1947	23,519.00
" " 1948	23,519.00
" " 1949	23,519.00
" " 1950	12,000.00
" " 1957	164,812.00

9. AEC costs of (1) medical care of Tennessee patients in AEC research hospital; (2) training Tennessee participants in radioisotope techniques and medical research programs; (3) traveling science demonstration programs and Tennessee student educational programs; (4) University research and participation, lecture programs; (5) Tennessee pre and post-doctoral fellowships in radiological physics, nuclear science and engineering, and industrial hygiene, and University of Tennessee Oak Ridge Resident Graduate Program:

Calendar Year 1950	\$ 116,407.00
" " 1951	103,178.00
" " 1952	125,690.00
" " 1953	158,096.00
" " 1954	146,752.00
" " 1955	130,672.00
" " 1956	183,179.00
" " 1957	171,887.00
" " 1958	251,010.00
Total:	<u>\$35,715,523.00</u>

[fol. 21] Entered into this — day of April, 1960.

United States of America, By Fred Elledge, Jr.,
U. S. Attorney for the Middle District of Ten-
nessee. Union Carbide Corporation, By R. R.
Kramer, Solicitor. Alfred T. McFarland, Com-
missioner, By Milton P. Rice, Solicitor.

[fol. 22] IN THE CHANCERY COURT FOR DAVIDSON COUNTY,
TENNESSEE

No. 80,060

UNITED STATES OF AMERICA AND UNION CARBIDE CORPORATION,

v.

B. J. BOYD, COMMISSIONER.

STIPULATION No. 3

It is further stipulated by the parties as follows:

1. The procurements, receipts and uses of tangible personal property asserted by the Commissioner to be taxable to Union Carbide Corporation (herein referred to as "Carbide") for the month of July, 1956, were made in connection with the contract between Carbide and the Atomic Energy Commission involved in this litigation.
2. Said procurements and receipts of tangible personal property were in the categories listed below and during

the month of July, 1956, the tax claimed for each category is as follows:

[fol. 23]

Procurements on Carbide order forms from vendors in Tennessee and from out of state vendors. (See Para. 3(a), 3(b), 3(c), 3(d) and 3(e) hereof)

Tax—\$67,493.98

Procurements on Atomic Energy Commission order forms from vendors in Tennessee. (See Para. 3(f) and 3(g) hereof)

Tax—\$ 2,405.28

Procurements on Carbide order forms under Federal Supply Contracts (See Para. 3(h) and 3(i) hereof)

Tax—\$1,120.94

Procurements on Carbide order forms from General Services Administration. (See Para. 3(j) hereof)

Tax—\$ 356.16

Total—\$71,376.36

3. All of such procurements and receipts of property in the above listed categories were made under contractual and related documents of which the following list is representative:

(a) Carbide Order No. 29K-45826, dated June 18, 1956, to Osborne Equipment Company for the purchase of pneumatic impact wrenches. Attached to this order, which, with attachments, is filed as Collective Exhibit G-43, are vendor's invoice, dated July 5, 1956; Carbide receiving report; and Carbide cancelled check No. 88264, dated July 13, 1956, issued in payment of said invoice, and drawn on a government fund account.

[fol. 24] (b) Carbide Order No. 67X-39732, dated April 19, 1956, to Southern Cast Stone Company for the purchase of roof plugs. Attached to this order, which, with attachments, is filed as Collective Exhibit C-44, are vendor's invoice, dated July 3, 1956; Carbide receiving report; and Carbide cancelled check No. 88151, dated July 13, 1956, issued in payment of said invoice, and drawn on a government fund account.

(c) Carbide Order No. 32X-40107, dated April 23,

1956, to Kinsman Scientific Equipment Company, Washington, D. C., price f.o.b. destination at Oak Ridge, Tennessee, for the purchase of miscellaneous equipment. Attached to this order, which, with attachments, is filed as Collective Exhibit C-45, are vendor's invoice; Carbide receiving report; and Carbide cancelled check No. 89952, dated July 24, 1956, issued in payment of said invoice, and drawn on a government fund account.

(d) Carbide Order No. 22K-46048, dated June 29, 1956, to Spraying Systems Company, Bellewood, Illinois, price f.o.b. Bellewood, Illinois, for the purchase of nozzles. Attached to the order, which, with attachments, is filed as Collective Exhibit C-46, are vendor's invoice; Carbide receiving report; and Carbide cancelled check No. 88454, dated July 16, 1956, issued in payment of said invoice, and drawn on a government fund account.

(e) Carbide Purchase Order Subcontract No. W30C-9329, dated February 8, 1956, with E. I. du Pont de Nemours and Company, Wilmington, Delaware, price f.o.b. shipping point, for the purchase of dichlorotetrafluoroethane. Attached to the subcontract, which, with attachments, is filed as Collective Exhibit C-47, are vendor's invoice; Carbide receiving report; and Carbide cancelled check No. 88888, dated July 18, 1956, issued in payment of said invoice, and drawn on a government fund account.

(f) Atomic Energy Commission Contract No. AT-(40-1)-2203, dated May 17, 1955, with Atlas Gas Company, Inc., for the purchase of petroleum gas. Attached to the contract, which, with attachments, is filed as Collective Exhibit C-48, are Carbide letter releases to vendor; vendor's invoices; Carbide receiving reports; and Carbide cancelled check No. 90028, dated July 25, 1956, issued in payment of said invoice, and drawn on a government fund account.

[fol. 26] (g) Atomic Energy Commission Contract No. AT-(40-1)-2246, dated January 6, 1956, with McPherson Coal Company, for the purchase of coal. Attached to the contract, which, with attachments, is filed as Collective Exhibit C-49, are vendor's invoices; Carbide receiving reports; Atomic Energy Commission

voucher; and Treasury Department check No. 373,554, dated July 9, 1956, issued in payment of said invoices.

(h) Carbide Orders No. 36K-45857, dated June 30, 1956, and No. 36K-44999, dated June 13, 1956, to Marchant Calculators, Inc., under General Services Administration Contract No. GS-03S-17160 issued for purchase of calculating machines. Attached to these orders, which, with attachments, is filed as Collective Exhibit C-50, are vendor's invoices dated June 22, and June 28, 1956; Carbide receiving reports; Carbide cancelled check No. 89606, dated July 23, 1956, issued in payment for said invoices, and drawn on a government fund account; letter, AEC to Carbide, dated September 7, 1954, authorizing Carbide to issue orders for supplies from Federal agencies, or under supply contracts executed by such agencies with suppliers, which authorization was in effect during the period involved in this lawsuit; Federal Supply Schedule for the procurement of office equipment effective during the period July 1, 1955, through June 30, 1956; and General Services Administration Contract No. GS-03S-17160 applicable to said transactions.

(i) Carbide Order No. W1B-33141, dated February 15, 1956, to Eastman Kodak Company, Rochester, New York, issued under General Services Administration Contract No. GS-OOS-1664, for the purchase of photographic materials. Attached to this order, which, with attachments, is filed as Collective Exhibit C-51, are Carbide letter releases; vendor's invoices; Carbide receiving reports; Carbide cancelled check No. 87340, dated July 10, 1956, issued in payment of said invoices, and drawn on a government fund account; letter, AEC to Carbide, dated September 7, 1954, authorizing Carbide to issue orders for supplies from Federal agencies or under supply contracts executed by such agencies with suppliers, which authorization was in effect during the period involved in this lawsuit; Federal Supply Schedule for the procurement of photographic paper and materials effective during the period [fol. 28] February 1, 1956, through January 31, 1957; and General Services Administration Contract No. GS-OOS-1664, applicable to such transaction.

(j) Carbide Order No. 56X-45945, dated June 22, 1956, to General Services Administration, for an electric clock. Attached to this order, which, with attachments, is filed as Collective Exhibit C-52, are GSA invoice; Carbide receiving report; Carbide check No. 91009, dated July 31, 1956, in payment of said invoice, and drawn on a government fund account; and letter, AEC to Carbide, dated September 7, 1954, authorizing Carbide to issue orders for supplies to the Federal Supply Service of the General Services Administration, which authorization was in effect during the period involved in this lawsuit.

4. The purchase order terms and conditions contained in the documents issued by Carbide as shown in Exhibits E-43, C-44, C-45, C-46, C-47, C-48, C-50, C-51 and C-52 are, in all material respects, the same as the terms and conditions in all such purchase orders and documents used by Carbide for the AEC work during the entire period covered by this litigation.

[fol. 29] 5. The Commissioner of Finance and Taxation, (the predecessor in official position of the Commissioner of Revenue) of the State of Tennessee authorized Carbide to issue a resale certificate under Rule 68(d) of the Rules and Regulations issued by the Commissioner of Finance and Taxation under the Retailers' Sales and Use Tax Act in lieu of paying the tax to vendors on transactions asserted to be taxable. This was done pursuant to an agreement between the AEC and the Commissioner of Finance and Taxation with the understanding and commitment that Carbide would pay directly to the State any tax later adjudicated to be due. (See collective Exhibit C-53) Pursuant to this authorization Carbide issued resale certificates covering all of the procurements of tangible personal property asserted to be taxable and involved in this litigation.

6. The Commissioner of Revenue of the State of Tennessee is not asserting that any Sales or Use Tax is due with respect to property exempt under Section 67-3004, T.C.A., nor with respect to property exempt as "industrial materials" as that term is used in Section 67-3002, T.C.A., nor with respect to property procured by AEC personnel from vendors outside Tennessee and which is furnished to Carbide under Contract W-7405-eng-26 and title to such

[fol. 30] property is in the Government at the time such property completes its interstate journey into Tennessee and title therein remains in the Government while such property is in use in Tennessee.

This stipulation may be filed in the above-styled case and read as evidence subject, however, to the right to object to the relevancy and competency of all or any part thereof upon the hearing of the case.

Entered into this — day of —, 1960.

United States of America, By Fred Elledge, Jr., U. S. Attorney for the Middle District of Tennessee.
Union Carbide Corporation, By R. R. Kramer, Solicitor. Alfred T. MacFarland, Commissioner, By Milton P. Rice, Solicitor.

[fol. 31] IN THE CHANCERY COURT FOR DAVIDSON COUNTY,
TENNESSEE

No. 80,060

STIPULATION No. 4

UNITED STATES OF AMERICA AND UNION CARBIDE CORPORATION,

v.
B. J. BOYD, COMMISSIONER.

No. 80,061

STIPULATION No. 3

UNITED STATES OF AMERICA AND THE H. K. FERGUSON
COMPANY,

v.
B. J. BOYD, COMMISSIONER.

STIPULATION No. 4

It is hereby stipulated by the parties hereto as follows:

1. The general rules and procedures promulgated by AEC relating to State and local taxes as applicable to the AEC and its contractors and sub-contractors are set forth

in Chapter 9115 of the AEC Manual (see Collective Exhibit C-54 filed herewith in Case No. 80,060).

2. Except to the extent of specific exemptions set forth in the Tennessee Act, the State of Tennessee, during the [fol. 32] period material in this litigation, collected, and still collects Sales and Use Taxes on procurements and uses of tangible personal property in Tennessee by certain AEC contractors. However, during the period material to this litigation Union Carbide Corporation (hereinafter referred to as "Carbide"), The H. K. Ferguson Company (hereinafter referred to as "Ferguson"), and other AEC contractors which have functioned under cost-type contracts similar to the Carbide and/or Ferguson contracts involved in this litigation have not paid Tennessee Sales Taxes on procurements of, or Tennessee Use Taxes on the use of, tangible personal property in Tennessee.

3. The AEC has major production plants and facilities located in Portsmouth and Fernald, Ohio, and at Weldon Spring, Missouri, which are managed, operated and maintained for AEC under cost-type contracts. These plants and facilities were built for AEC under cost-type contracts. The cost-type construction contractors and cost-type operating contractors at these plants and facilities are not paying, and have not paid State Sales and Use Taxes on property procured and utilized in their AEC contract work.

4. AEC has a large production facility in South Carolina which is operated for AEC by E. I. du Pont de Nemours [fol. 33] under a cost-type contract. E. I. du Pont has paid the South Carolina Sales Tax on in-State procurements for this contract work made subsequent to March 20, 1954, the effective date of an amendatory revision of the South Carolina Act. E. I. du Pont has not paid and is not paying the South Carolina Use Tax on property furnished to E. I. du Pont by AEC or procured by E. I. du Pont outside South Carolina for use under its contract with AEC. A claim by the State of South Carolina against E. I. du Pont for payment of Use Taxes on such property, and a claim for payment of Sales Tax on procurements before March 20, 1954, are being resisted in the Courts.

5. AEC has a large production facility in the State of Washington which is operated for AEC by the General Electric Company under a cost-type contract. AEC also

has a cost-type construction contract with the J. A. Jones Construction Company for the performance of construction services at this facility. Neither of these contractors has paid or is paying the State of Washington Sales or Use Tax on procurements or uses of property in the performance of their contract work.

6. AEC has major production and research facilities in the State of New Mexico which are operated by cost-type contractors. These contractors have not paid and are not paying the State of New Mexico Use Tax on property used [fol. 34] by them in the performance of their contract work. Since 1957 in-state vendors making sales to these AEC cost-type contractors have paid the New Mexico Sales Tax under protest at the request of AEC pending a test of the applicability of the Tax Statute to AEC contractor procurement.

7. AEC has installations in the State of California which are used in the AEC program. These consist primarily of installations for the conduct of research in the field of atomic energy. Cost-type contractors operating AEC installations in California, and other cost-type contractors performing work for AEC in California have not paid and are not paying California Sales or Use Taxes on procurements or uses of property for their contract work where title to such property passed or passes to the Government, except on procurements of items of property by AEC prime construction contractors for use in the construction of improvements to real property.

8. AEC cost-type contractors in the States of Colorado, Florida and Connecticut did not pay during the period material to this litigation, and are not now paying State Sales and Use Taxes on procurements and uses of property for their AEC contract work.

9. Not all of the contracts under which AEC contractors have operated or constructed AEC facilities contained provisions, terms and conditions similar to all of the provisions, [fol. 35] terms and conditions contained in the Carbide and/or Ferguson contracts involved in this litigation. Neither did all of the purchase orders, and sub-contracts utilized by such contractors contain all the provisions, terms and conditions contained in the purchase order and sub-contract documents which Carbide and/or Ferguson

utilized in connection with the activities involved in this litigation.

This Stipulation may be filed in the above-styled cases and read as evidence, subject, however, to the right of objection to the relevancy and competency of all or any part thereof upon the hearing of the case.

Entered into this 20th day of December, 1960.

United States of America, By Fred Elledge, Jr.,
U. S. Attorney for the Middle District of Tennessee. Union Carbide Corporation, By R. R. Kramer, Solicitor. The H. K. Ferguson Company, By R. R. Kramer, Solicitor. Alfred T. MacFarland, Commissioner, By Milton P. Rice, Solicitor.

[fol. 36] IN THE CHANCERY COURT FOR DAVIDSON COUNTY,
TENNESSEE

No. 80,069

UNITED STATES OF AMERICA AND UNION CARBIDE CORPORATION,

v.

B. J. BOYD, COMMISSIONER

STIPULATION No. 5

It is further stipulated by the parties as follows:

1. The Department of Revenue (formerly the Department of Finance and Taxation) of the State of Tennessee, during the period material to this litigation did not, and does not now, collect the Sales and Use Tax levied under 67 Tennessee Code Annotated, Section 3001 on direct procurements and uses of tangible personal property by the State and its political subdivisions, including utility districts chartered and operated under 6 Tennessee Code Annotated, Section 2601 et seq.

2. The phrase "during the period material to this litigation," as used in this Stipulation and as used elsewhere in proof or Stipulations on file in this case, and also the

[fol. 37] phrase "during the period involved in this litigation" and the phrase "during the entire period covered by this litigation" as used in proof or Stipulations filed in this case are intended and shall be construed as referring to the period from August 12, 1955, to March 31, 1957, inclusive.

3. This Stipulation may be filed in the above-styled case and read as evidence subject, however, to the right to object to the relevancy and competency of all or any part thereof upon the hearing of this case.

Entered into this 12th day of October, 1960.

United States of America, By Fred Elledge, Jr.,
U. S. Attorney for the Middle District of Tennessee. Union Carbide Corporation, By R. R. Kramer, Solicitor. Alfred T. McFarland, Commissioner, By Milton P. Rice, Solicitor.

[fol. 1] IN THE CHANCERY COURT FOR DAVIDSON COUNTY,
TENNESSEE

No. 80,061

UNITED STATES OF AMERICA AND THE H. K. FERGUSON
COMPANY,

v.

B. J. BOYD, COMMISSIONER.

STIPULATION No. 1

It is hereby stipulated by the parties to this action that Stipulations 1, 1-A and 2 as filed in the case of *United States of America and Union Carbide Corporation v. B. J. Boyd, Commissioner*, being action No. 80,060 on the Rule Docket of this Court, will be considered as filed in this action and they are made a part of the record hereof and that the same may be considered and used as evidence in this action the same as if they had been originally filed herein, subject only to objections for relevancy and materiality.

It is agreed and stipulated that the depositions taken and filed, including all exhibits filed in said action No. 80,060, will be considered as having likewise been filed in this case and that the same may be considered and used in evidence in this case the same as if they had been originally [fol. 2] filed in this action, subject only to objections for relevancy and materiality. Said exhibits need not be re-numbered in the present action, but may be referred to by the identification numbers which they respectively bear in said action No. 80,060.

The phrase "during the period involved in this litigation," the phrase "during the entire period covered by this litigation," and the phrase "during the period material to this litigation," and other similar phrases as used in referring to this action, are intended and shall be construed as referring to the period from August 12, 1955, to March 31, 1957, inclusive.

Entered into this 27th day of July, 1960.

United States of America, By Fred Elledge, Jr., U. S.
Attorney for the Middle District of Tennessee.
The H. K. Ferguson Company, By R. R. Kramer,
Solicitor. Alfred T. MacFarland, Commissioner,
By Milton P. Rice, Solicitor.

[fol. 3] IN THE CHANCERY COURT FOR DAVIDSON COUNTY,
TENNESSEE

No. 80,061

UNITED STATES OF AMERICA AND THE H. K. FERGUSON
COMPANY,

v.

B. J. BOYD, COMMISSIONER.

STIPULATION No. 2

It is hereby stipulated by the parties to this cause as follows:

1. The procurements, receipts, and uses of tangible personal property asserted by the Commissioner to be taxable to The H. K. Ferguson Company (hereinafter referred to as "Ferguson") for the month of November, 1956, were made in connection with the contract between Ferguson and the Atomic Energy Commission involved in this litigation.

2. Said procurements and receipts of tangible personal property were in the categories listed below, and, during the month of November, 1956, the tax claimed for each category is as follows:

[fol. 4]

Procurements on Ferguson order forms from vendors in Tennessee and from out-of-state vendors (See paragraphs 3(a), 3(b) and 3(c) hereof).

Tax—\$11,725.02

Procurements on Atomic Energy Commission order forms in Tennessee (See paragraph 3(d) hereof).

Tax—\$ 326.17

Procurements on Ferguson order forms under Federal Supply Contracts (See paragraph 3(e) hereof).

Tax—\$ 5.75

Procurements on Ferguson order forms from General Services Administration (See paragraph 3(f) hereof).

Tax—\$ 50.58

Total—\$12,107.52

3. All of such procurements and receipts of tangible personal property were made under the contractual and related documents of which the following list is representative:

(a) Ferguson Order No. 1854 F-10542, dated November 15, 1956, to Slipnot Belting Company for the purchase of stainless steel sheets and flanges. Attached to this order, which, with attachments, is filed as Collective Exhibit F-5, are Ferguson requisitions, dated October 24 and November 6, 1956; vendor's invoices, dated November 19 and November 20, 1956; Ferguson receiving reports; and Ferguson cancelled check No. 5826, dated November 27, 1956, issued in payment of said invoices and drawn on a Government fund account.

[fol. 5] (b) Ferguson Order No. 1854 F-4208, dated October 31, 1956, to Barrett Electric Supply Company for the purchase of electric supplies. Attached to this order, which, with attachments, is filed as Collective Exhibit F-6, are Ferguson purchase requisition dated October 5, 1956; vendor's invoices, dated October 25, October 31, and November 23, 1956; Ferguson receiving reports; and Ferguson cancelled check No. 6003, dated December 4, 1956, issued in payment of said invoices, and drawn on a Government fund account.

(c) Ferguson Order No. 1854 F-3905, dated October

16, 1956, to Kieley and Mueller, Inc., for the purchase of a control valve. Attached to this order, which, with attachments, is filed as Collective Exhibit F-7, are Ferguson purchase requisition, dated September 18, 1956; vendor's invoice, dated November 13, 1956; Ferguson receiving report; and Ferguson cancelled check No. 5716, dated November 21, 1956, issued in payment of said invoice, and drawn on a Government fund account.

(d) Atomic Energy Commission Contract No. AT-(40-1)-1662, dated November 5, 1953, as amended, with Ralph Rogers and Company, Inc., for the furnishing [fol. 6] of crushed limestone. Attached to the contract, which, with attachments, is filed as Collective Exhibit F-8, are Ferguson Order No. 1854 F-186, dated October 17, 1955; Ferguson receiving reports; invoices of Ralph Rogers and Company; Atomic Energy Commission voucher and schedule of payments showing Treasury Department Check No. 391043 issued in payment of said invoices; AEC current account transfer voucher; and letter, AEC to Ferguson, dated October 12, 1955.

(e) Ferguson Order No. 1854 F-316, dated January 23, 1956, revised August 27, 1956, to Remington Rand Division of Sperry Rand Corporation, under General Services Administration Contract No. GS-005-3368 for the purchase of typewriter parts and repair services. Attached to this order, which, with attachments, constitutes Collective Exhibit F-9, are vendor's invoice, dated November 8, 1956; Ferguson cancelled check No. 5671, dated November 20, 1956, issued in payment of said invoice and drawn on a Government fund account; General Services Administration Contract No. GS-005-3368 (Invitation, Bid, and Award); terms and conditions and general provisions for Federal Supply Schedule contracts; and AEC letter, dated November 3, [fol. 7] 1955, authorizing Ferguson to issue orders for supplies under Federal Supply contracts.

(f) Ferguson Order No. 1854 F-3660, dated September 25, 1956, to General Services Administration for office supplies. Attached to this order, which, with attachments, is filed as Collective Exhibit F-10, are

General Services Administration invoice; Ferguson receiving reports; Ferguson cancelled check No. 5842, dated November 28, 1956, issued in payment of said invoice; and drawn on a Government fund account; and letter, AEC to Ferguson, dated November 3, 1955, authorizing Ferguson to issue orders for supplies to the Federal Supply Service of the General Services Administration, which authorization was in effect during the month of November, 1956.

4. The procurements, receipts and uses of tangible personal property involved in this litigation include numerous items of ordinary building materials such as lumber, nails, building blocks and tile.

5. The purchase order terms and conditions contained in the documents issued by Ferguson shown in Exhibits F-5 through F-10 are in all material respects the same as the terms and conditions in all such purchase orders and documents [fol. 8] used by Ferguson for AEC work during the entire period covered by this litigation.

6. The Commissioner of Finance and Taxation (the predecessor in official position of the Commissioner of Revenue) of the State of Tennessee authorized Ferguson to issue a resale certificate under Rule 68(d) of the Rules and Regulations issued by the Commissioner of Finance and Taxation under the Retailers' Sales and Use Tax Act in lieu of paying the tax to vendors on transactions asserted to be taxable. This was done pursuant to an agreement between the AEC and the Commissioner of Finance and Taxation with the understanding and commitment that Ferguson would pay directly to the State any tax later adjudicated to be due (see Exhibit F-11, filed herewith). Pursuant to this authorization Ferguson issued resale certificates covering all of the procurements of tangible personal property asserted to be taxable which is involved in this litigation.

7. The Commissioner of Revenue of the State of Tennessee is not asserting that any Sales or Use Tax is due with respect to property exempt under Section 67-3004, TCA, nor with respect to property exempt as "industrial materials" as that term is used in Section 67-3002, TCA, nor with respect to property procured by AEC personnel

from vendors outside Tennessee and furnished to Ferguson under Contract No. AT-(40-1)-2014 where title to such [fol. 9] property is in the Government at the time such property completes its interstate journey into Tennessee and said title therein remains in the Government while in use in Tennessee.

This stipulation may be filed in the above-styled case and read as evidence subject, however, to the right to object to the relevancy and competency of all or any part thereof upon the hearing of the case.

Entered into this 27th day of July, 1960.

United States of America, By Fred Elledge, Jr.
U. S. Attorney for the Middle District of Tennessee. The H. K. Ferguson Company, By R. R. Kramer, Solicitor. Alfred T. MacFarland, Commissioner, By Milton P. Rice, Solicitor.

[fol. 10] IN THE CHANCERY COURT FOR DAVIDSON COUNTY,
TENNESSEE

No. 80,061

UNITED STATES OF AMERICA AND THE H. K. FERGUSON
COMPANY,

v.

B. J. BOYD, COMMISSIONER

STIPULATION No. 4

It is further stipulated by the parties as follows:

1. The Department of Revenue (formerly the Department of Finance and Taxation) of the State of Tennessee, during the period material to this litigation did not, and does not now, collect the Sales and Use Tax levied under 67 Tennessee Code Annotated, Section 3001 on direct procurements and uses of tangible personal property by the State and its political subdivisions, including utility dis-

stricts chartered and operated under 6 Tennessee Code Annotated, Section 2601 et seq.

2. This Stipulation may be filed in the above-styled case and read as evidence subject, however, to the right to [fol. 11] object to the relevancy and competency of all or any part thereof upon the hearing of this case.

Entered into this 12th day of October, 1960.

United States of America, By Fred Elledge, Jr.,
U. S. Attorney for the Middle District of Tennessee. The H. K. Ferguson Company, By R. R. Kramer, Solicitor. Alfred T. McFarland, Commissioner, By Milton P. Rice, Solicitor.

[fol. 12] SUPREME COURT OF THE UNITED STATES, OCTOBER
TERM, 1963

No. 185

UNITED STATES, ET AL., APPELLANTS,

v.

B. J. BOYD, COMMISSIONER

ORDER NOTING PROBABLE JURISDICTION—October 14, 1963

Appeal from the Supreme Court of the State of Tennessee, Middle Division.

The statement of jurisdiction in this case having been submitted and considered by the Court, probable jurisdiction is noted.

October 14, 1963.